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THE EUROPEAN PARLIAMENT

THE COUNCIL

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**REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL
ON CLASSIFICATION, LABELLING AND PACKAGING
OF SUBSTANCES AND MIXTURES,
AMENDING AND REPEALING DIRECTIVES 67/548/EEC AND 1999/45/EC,
AND AMENDING REGULATION (EC) No 1907/2006**

**REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT
AND OF THE COUNCIL**

of 16 December 2008

**on classification, labelling and packaging of substances and mixtures,
amending and repealing Directives 67/548/EEC and 1999/45/EC,
and amending Regulation (EC) No 1907/2006**

(Text with EEA relevance)

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Community, and in particular Article 95 thereof,

Having regard to the proposal from the Commission,

Having regard to the opinion of the European Economic and Social Committee¹,

Acting in accordance with the procedure laid down in Article 251 of the Treaty²,

Whereas:

- (1) This Regulation should ensure a high level of protection of human health and the environment as well as the free movement of chemical substances, mixtures and certain specific articles, while enhancing competitiveness and innovation.
- (2) The efficient functioning of the internal market for substances, mixtures and those articles can be achieved only if the requirements applicable to them do not differ significantly between Member States.

¹ OJ C 204, 09.8.2008, p. 47.

² Opinion of the European Parliament of 3 September 2008 (not yet published in the Official Journal).

- (3) A high level of human health and environmental protection should be ensured in the approximation of legislation on the criteria for classification and labelling of substances and mixtures, with the goal of achieving sustainable development.
- (4) Trade in substances and mixtures is an issue relating not only to the internal market, but also to the global market. Enterprises should therefore benefit from the global harmonisation of rules for classification and labelling and from consistency between, on the one hand, the rules for classification and labelling for supply and use and, on the other hand, those for transport.
- (5) With a view to facilitating worldwide trade while protecting human health and the environment, harmonised criteria for classification and labelling have been carefully developed over a period of 12 years within the United Nations (UN) structure, resulting in the Globally Harmonised System of Classification and Labelling of Chemicals (hereinafter referred to as "the GHS").
- (6) This Regulation follows various declarations whereby the Community confirmed its intention to contribute to the global harmonisation of criteria for classification and labelling, not only at UN level, but also through the incorporation of the internationally agreed GHS criteria into Community law.
- (7) The benefits for enterprises will increase as more countries in the world adopt the GHS criteria in their legislation. The Community should be at the forefront of this process to encourage other countries to follow and with the aim of providing a competitive advantage to industry in the Community.
- (8) Therefore it is essential to harmonise the provisions and criteria for the classification and labelling of substances, mixtures and certain specific articles within the Community, taking into account the classification criteria and labelling rules of the GHS, but also by building on the 40 years of experience obtained through implementation of existing Community chemicals legislation and maintaining the level of protection achieved through the system of harmonisation of classification and labelling, through Community hazard classes not yet part of the GHS as well as through current labelling and packaging rules.
- (9) This Regulation should be without prejudice to the full and complete application of Community competition rules.

- (10) The objective of this Regulation should be to determine which properties of substances and mixtures should lead to a classification as hazardous, in order for the hazards of substances and mixtures to be properly identified and communicated. Such properties should include physical hazards as well as hazards to human health and to the environment, including hazards to the ozone layer.
- (11) This Regulation should, as a general principle, apply to all substances and mixtures supplied in the Community, except where other Community legislation lays down more specific rules on classification and labelling, such as Council Directive 76/768/EEC of 27 July 1976 on the approximation of the laws of the Member States relating to cosmetic products¹, Council Directive 82/471/EEC of 30 June 1982 concerning certain products used in animal nutrition², Council Directive 88/388/EEC of 22 June 1988 on the approximation of the laws of the Member States relating to flavourings for use in foodstuffs and to source materials for their production³, Council Directive 89/107/EEC of 21 December 1988 on the approximation of the laws of the Member States concerning food additives authorised for use in foodstuffs intended for human consumption⁴, Council Directive 90/385/EEC of 20 June 1990 on the approximation of the laws of the Member States relating to active implantable medical devices⁵, Council Directive 93/42/EEC of 14 June 1993 concerning medical devices⁶, Directive 98/79/EC of the European Parliament and of the Council of 27 October 1998 on in vitro diagnostic medical devices⁷, Commission Decision 1999/217/EC of 23 February 1999 adopting a register of flavouring substances used in or on foodstuffs drawn up in application of Regulation (EC) No 2232/96 of the European Parliament and of the Council of 28 October 1996⁸, Directive 2001/82/EC of the European Parliament and of the Council of 6 November 2001 on the Community code relating to veterinary medicinal products⁹, Directive 2001/83/EC of the European Parliament and of the Council of 6 November 2001

¹ OJ L 262, 27.9.1976, p. 169.

² OJ L 213, 21.7.1982, p. 8.

³ OJ L 184, 15.7.1988, p. 61.

⁴ OJ L 40, 11.2.1989, p. 27.

⁵ OJ L 189, 20.7.1990, p. 17.

⁶ OJ L 169, 12.7.1993, p. 1.

⁷ OJ L 331, 7.12.1998, p. 1.

⁸ OJ L 84, 27.3.1999, p. 1.

⁹ OJ L 311, 28.11.2001, p. 1.

on the Community code relating to medicinal products for human use¹, Regulation (EC) No 178/2002 of the European Parliament and of the Council of 28 January 2002 laying down the general principles and requirements of food law, establishing the European Food Safety Authority and laying down procedures in matters of food safety² and Regulation (EC) No 1831/2003 of the European Parliament and of the Council of 22 September 2003 on additives for use in animal nutrition³ or except where substances and mixtures are transported by air, sea, road, rail or inland waterways.

- (12) The terms and definitions used in this Regulation should be consistent with those set out in Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)⁴, with those set out in the rules governing transport and with the definitions specified at UN level in the GHS, in order to ensure maximum consistency in the application of chemicals legislation within the Community in the context of global trade. The hazard classes specified in the GHS should be set out in this Regulation for the same reason.
- (13) It is especially appropriate to include those hazard classes defined in the GHS which specifically take account of the fact that the physical hazards which may be exhibited by substances and mixtures are to some extent influenced by the way in which they are released.
- (14) The term "mixture" as defined in this Regulation should have the same meaning as the term "preparation" previously used in Community legislation.
- (15) This Regulation should replace Council Directive 67/548/EEC of 27 June 1967 on the approximation of the laws, regulations and administrative provisions relating to the classification, packaging and labelling of dangerous substances¹ as well as Directive 1999/45/EC of the European Parliament and of the Council of 31 May 1999 concerning the approximation of the laws, regulations and administrative provisions of the Member States relating to the classification, packaging and labelling of dangerous

¹ OJ L 311, 28.11.2001, p. 67.

² OJ L 31, 1.2.2002, p. 1.

³ OJ L 268, 18.10.2003, p. 29.

⁴ OJ L 396, 30.12.2006, p. 1. Corrected version in OJ L 136, 29.5.2007, p. 3.

preparations². It should maintain the overall current level of protection of human health and the environment provided by those Directives. Therefore, some hazard classes which are covered by those Directives but are not yet included in the GHS should be maintained in this Regulation.

- (16) Responsibility for the identification of hazards of substances and mixtures and for deciding on their classification should mainly lie with manufacturers, importers and downstream users of those substances or mixtures, regardless of whether they are subject to the requirements of Regulation (EC) No 1907/2006. In fulfilling their responsibilities for classification, downstream users should be allowed to use the classification of a substance or mixture derived in accordance with this Regulation by an actor in the supply chain, provided that they do not change the composition of the substance or mixture. Responsibility for classification of substances not placed on the market that are subject to registration or notification under Regulation (EC) No 1907/2006 should mainly lie with the manufacturers, producers of articles and importers. However, there should be a possibility to provide for harmonised classifications of substances for hazard classes of highest concern and of other substances on a case-by-case basis which should be applied by all manufacturers, importers and downstream users of such substances and of mixtures containing such substances.
- (17) Where a decision has been taken to harmonise the classification of a substance for a specific hazard class or differentiation within a hazard class by including or revising an entry for that purpose in Part 3 of Annex VI to this Regulation, the manufacturer, importer and downstream user should apply this harmonised classification, and only self-classify for the remaining, non-harmonised hazard classes or differentiations within the hazard class.
- (18) To ensure that customers receive information on hazards, suppliers of substances and mixtures should ensure that they are labelled and packaged in accordance with this Regulation before placing them on the market, according to the classification derived. In fulfilling their responsibilities downstream users should be allowed to use the classification of a substance or mixture derived in accordance with this Regulation by an actor in the supply chain, provided that they do not change the composition of the

¹ OJ 196, 16.8.1967, p. 1.

² OJ L 200, 30.7.1999, p. 1.

substance or mixture, and distributors should be allowed to use the classification of a substance or mixture derived in accordance with this Regulation by an actor in the supply chain.

- (19) To ensure information on hazardous substances is available when they are included in mixtures containing at least one substance that is classified as hazardous, supplemental labelling information should be provided, where applicable.
- (20) While a manufacturer, importer or downstream user of any substance or mixture should not be obliged to generate new toxicological or eco-toxicological data for the purpose of classification, he should identify all relevant information available to him on the hazards of the substance or mixture and evaluate its quality. The manufacturer, importer or downstream user should also take into account historical human data, such as epidemiological studies on exposed populations, accidental or occupational exposure and effect data, and clinical studies. That information should be compared with the criteria for the different hazard classes and differentiations in order for that manufacturer, importer or downstream user to arrive at a conclusion as to whether or not the substance or mixture should be classified as hazardous.
- (21) While the classification of any substance or mixture may be carried out on the basis of available information, the available information to be used for the purposes of this Regulation should preferably have been generated in accordance with the test methods referred to in Regulation (EC) No 1907/2006, transport provisions or international principles or procedures for the validation of information, so as to ensure quality and comparability of the results and consistency with other requirements at international or Community level. The same test methods, provisions, principles and procedures should be followed where the manufacturer, importer or downstream user chooses to generate new information.
- (22) To facilitate hazard identification for mixtures, manufacturers, importers and downstream users should base this identification on the data for the mixture itself, where available, except for mixtures with carcinogenic, germ cell mutagenic or reproductive toxic substances, or where the biodegradation or bioaccumulation properties in the hazard class hazardous to the aquatic environment are evaluated. In those cases, as the hazards of the mixture cannot be sufficiently assessed in a manner that is based on the mixture itself, the

data for the individual substances of the mixture should normally be used as a basis for the hazard identification of the mixture.

- (23) If sufficient information is available on similar tested mixtures, including relevant ingredients of the mixtures, it is possible to determine the hazardous properties of an untested mixture by applying certain rules known as "bridging principles." Those rules allow characterisation of the hazards of the mixture without performing tests on it, but rather by building on the available information on similar tested mixtures. Where no or inadequate test data are available for the mixture itself, manufacturers, importers and downstream users should therefore follow the bridging principles to ensure adequate comparability of results of the classification of such mixtures.
- (24) Specific industry sectors may establish networks to facilitate exchange of data and bring together expertise in the evaluation of information, test data, weight of evidence determinations and bridging principles. Such networks may support manufacturers, importers and downstream users within those industry sectors, and in particular small and medium-sized enterprises (SMEs) in the fulfilment of their obligations under this Regulation. Those networks may also be used to exchange information and best practices with a view to simplifying fulfilment of the notification obligations. Suppliers making use of such support should remain fully responsible for the fulfilment of their classification, labelling and packaging responsibilities under this Regulation.
- (25) The protection of animals falling within the scope of Council Directive 86/609/EEC of 24 November 1986 on the approximation of laws, regulations and administrative provisions of the Member States regarding the protection of animals used for experimental and other scientific purposes¹ is of high priority. Accordingly, where the manufacturer, importer or downstream user chooses to generate information for the purposes of this Regulation, they should first consider means other than testing on animals within the scope of Directive 86/609/EEC. Tests on non-human primates should be prohibited for the purposes of this Regulation.
- (26) The test methods in Commission Regulation (EC) No 440/2008 of 30 May 2008 laying down test methods pursuant to Regulation (EC) No 1907/2006 of the European Parliament

¹ OJ L 358, 18.12.1986, p. 1.

and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)¹ are regularly reviewed and improved with a view to reducing testing on vertebrate animals and the number of animals involved. The European Centre for the Validation of Alternative Methods (ECVAM) of the Commission's Joint Research Centre plays an important role in the scientific assessment and validation of alternative test methods.

- (27) The classification and labelling criteria set out in this Regulation should take the utmost account of promoting alternative methods for the assessment of hazards of substances and mixtures and of the obligation to generate information on intrinsic properties by means other than tests on animals within the meaning of Directive 86/609/EEC as laid down in Regulation (EC) No 1907/2006. Future criteria should not become a barrier to this aim and the corresponding obligations under that Regulation, and should under no circumstances lead to the use of animal tests where alternative tests are adequate for the purposes of classification and labelling.
- (28) For the purposes of classification, data should not be generated by means of testing on humans. Available, reliable epidemiological data and experience with regard to the effects of substances and mixtures on humans (e.g. occupational data and data from accident databases) should be taken into account and may be given priority over data derived from animal studies when they demonstrate hazards not identified from those studies. The results of animal studies should be weighed against the results of data from humans and expert judgement should be used to ensure the best protection of human health when evaluating both the animal and human data.
- (29) New information as regards physical hazards should always be necessary, except if the data are already available or if a derogation is provided for in this Regulation.
- (30) Testing that is carried out for the sole purpose of this Regulation should be carried out on the substance or mixture in the form(s) or physical state(s) in which the substance or mixture is placed on the market and in which it can reasonably be expected to be used. It should, however, be possible to use, for the purpose of this Regulation, the results of tests that are carried out to comply with other regulatory requirements, including those laid

¹ OJ L 142, 31.5.2008, p. 1.

down by third countries, even if the tests were not carried out on the substance or mixture in the form(s) or physical state(s) in which it is placed on the market and in which it can reasonably be expected to be used.

- (31) If tests are performed, they should comply where appropriate with the relevant requirements for the protection of laboratory animals, set out in Directive 86/609/EEC, and, in the case of ecotoxicological and toxicological tests, good laboratory practice, set out in Directive 2004/10/EC of the European Parliament and of the Council of 11 February 2004 on the harmonisation of laws, regulations and administrative provisions relating to the application of the principles of good laboratory practice and the verification of their application for tests on chemical substances¹.
- (32) The criteria for classification in different hazard classes and differentiations should be set out in an annex, which should also contain additional provisions as to how the criteria may be met.
- (33) Recognising that the application of the criteria for the different hazard classes to information is not always straightforward and simple, manufacturers, importers and downstream users should apply weight of evidence determinations involving expert judgment to arrive at adequate results.
- (34) Specific concentration limits for substances should be assigned to a substance by a manufacturer, importer or downstream user in accordance with the criteria referred to in this Regulation, provided the manufacturer, importer or downstream user is able to justify the limits and informs the European Chemicals Agency (hereinafter referred to as "the Agency") accordingly. However, specific concentration limits should not be set for harmonised hazard classes or differentiations for substances included in the harmonised classification and labelling tables annexed to this Regulation. Guidance should be provided by the Agency for the purpose of setting the specific concentration limits. In order to ensure uniformity, specific concentration limits should also be included, where appropriate, in cases of harmonised classifications. Specific concentration limits should take precedence over any other concentration limit for the purpose of classification.

¹ OJ L 50, 20.2.2004, p. 44.

- (35) Multiplying factors ("M-factors") for substances classified as hazardous to the aquatic environment, acute category 1 or chronic category 1, should be assigned to a substance by a manufacturer, importer or downstream user in accordance with the criteria referred to in this Regulation. Guidance should be provided by the Agency for the purpose of setting the M-factors.
- (36) For reasons of proportionality and workability, generic cut-off values should be defined, both for identified impurities, additives and individual constituents of substances and for substances in mixtures, specifying when information on these should be taken into account in determining the hazard classification of substances and mixtures.
- (37) To ensure adequate classification of mixtures, available information on synergistic and antagonistic effects should be taken into account for the classification of mixtures.
- (38) Manufacturers, importers and downstream users should re-evaluate the classifications of substances or mixtures they place on the market if they become aware of new adequate and reliable scientific or technical information that may affect those classifications or if they change the composition of their mixtures, to ensure that the classification is based on up-to-date information, unless there is sufficient evidence that the classification would not change. Suppliers should update the labels accordingly.
- (39) Substances and mixtures classified as hazardous should be labelled and packaged according to their classification, so as to ensure appropriate protection and to provide essential information to their recipients, by drawing their attention to the hazards of the substance or mixture.
- (40) The two instruments foreseen by this Regulation to be used to communicate the hazards of substances and mixtures are labels and the safety data sheets provided for in Regulation (EC) No 1907/2006. Of these two, the label is the only tool for communication to consumers, but it may also serve to draw the attention of workers to the more comprehensive information on substances or mixtures provided in safety data sheets. Since the provisions on safety data sheets are included in Regulation (EC) No 1907/2006 which uses the safety data sheet as the main communication tool within the supply chain of substances, it is appropriate not to duplicate the same provisions in this Regulation.

- (41) To ensure proper and comprehensive information provision to consumers on the hazards and safe use of chemicals and mixtures, the use and dissemination of Internet sites and free-phone numbers should be promoted, particularly in connection with information provision on specific types of packaging.
- (42) Workers and consumers worldwide would benefit from a globally harmonised hazard communication tool in the form of labelling. Therefore, the elements to be included in labels should be specified in accordance with the hazard pictograms, signal words, hazard statements and precautionary statements which form the core information of the GHS. Other information included in labels should be limited to a minimum and should not call into question the main elements.
- (43) It is essential that the substances and mixtures placed on the market are well identified. However, the Agency should allow enterprises, upon their request and where necessary, to describe the chemical identity of certain substances in a way that does not put the confidential nature of their businesses at risk. Where the Agency refuses such a request an appeal should be allowed in accordance with this Regulation. The appeal should have a suspensive effect, so that the confidential information with regard to which the request has been made, should not appear on the label while the appeal is pending.
- (44) The International Union of Pure and Applied Chemistry (IUPAC) is a long-standing global authority on chemical nomenclature and terminology. Identification of substances by their IUPAC name is widespread practice worldwide and provides the standard basis for identifying substances in an international and multilingual context. It is therefore appropriate to use these names for the purposes of this Regulation.
- (45) The Chemical Abstracts Service (CAS) provides a system whereby substances are added to the CAS Registry and are assigned a unique CAS Registry Number. Those CAS numbers are used in reference works, databases, and regulatory compliance documents throughout the world to identify substances without the ambiguity of chemical nomenclature. It is therefore appropriate to use the CAS numbers for the purposes of this Regulation.
- (46) To limit the information on the label to the most essential information, principles of precedence should determine the most appropriate label elements for cases in which substances or mixtures possess several hazardous properties.

- (47) Council Directive 91/414/EEC of 15 July 1991 concerning the placing of plant protection products on the market¹ and Directive 98/8/EC of the European Parliament and of the Council of 16 February 1998 concerning the placing of biocidal products on the market² should remain fully applicable to any product within their scope.
- (48) Statements such as "non-toxic", "non-harmful", "non-polluting", "ecological" or other statements indicating that the substance or mixture is not hazardous or any other statements that are inconsistent with its classification should not appear on the label or packaging of any substance or mixture.
- (49) In general, substances and mixtures, especially those supplied to the general public, should be supplied in packaging together with the necessary labelling information. The supply of appropriate information between professionals, including for unpackaged substances and mixtures, is ensured by Regulation (EC) No 1907/2006. However, in exceptional circumstances substances and mixtures may also be supplied to the general public unpackaged. Where appropriate, relevant labelling information should be supplied to the general public by other means, such as an invoice or bill.
- (50) Rules for the application of labels and the location of information on labels are necessary to ensure that the information on labels can be easily understood.
- (51) This Regulation should set general packaging standards, in order to ensure the safe supply of hazardous substances and mixtures.
- (52) The resources of the authorities should be focused on substances of the highest concern with regard to health and to the environment. Provision should therefore be made to enable competent authorities and manufacturers, importers and downstream users to submit proposals to the Agency for a harmonised classification and labelling of substances classified for carcinogenicity, germ cell mutagenicity or reproductive toxicity categories 1A, 1B or 2, for respiratory sensitisation, or in respect of other effects on a case-by-case basis. The competent authorities of Member States should also be able to propose harmonised classification and labelling for active substances used in plant protection products and biocidal products. The Agency should give its opinion on the

¹ OJ L 230, 19.8.1991, p. 1.

² OJ L 123, 24.4.1998, p. 1.

proposal while interested parties should have an opportunity to comment. The Commission should submit a draft decision on the final classification and labelling elements.

- (53) In order to take full account of the work and experience accumulated under Directive 67/548/EEC, including the classification and labelling of specific substances listed in Annex I of Directive 67/548/EEC, all existing harmonised classifications should be converted into new harmonised classifications using the new criteria. Moreover, as the applicability of this Regulation is deferred and the harmonised classifications in accordance with the criteria of Directive 67/548/EEC are relevant for the classification of substances and mixtures during the ensuing transition period, all existing harmonised classifications should also be placed unchanged in an annex to this Regulation. By subjecting all future harmonisations of classifications to this Regulation, inconsistencies in harmonised classifications of the same substance under the existing and the new criteria should be avoided.
- (54) In order to achieve the efficient functioning of the internal market for substances and mixtures, while at the same time ensuring a high level of protection for human health and the environment, rules should be established for a classification and labelling inventory. The classification and labelling for any registered or hazardous substance placed on the market should therefore be notified to the Agency to be included in the inventory.
- (55) The Agency should study the possibilities for further simplification of the notification procedure in particular taking into account the needs of SMEs.
- (56) Different manufacturers and importers of the same substance should make every effort to agree on a single classification for that substance except for hazard classes and differentiations subject to a harmonised classification for that substance.
- (57) To ensure a harmonised level of protection for the general public, and, in particular, for persons who come into contact with certain substances, and the proper functioning of other Community legislation relying on classification and labelling, an inventory should record the classification in accordance with this Regulation agreed, if possible, by manufacturers and importers of the same substance, as well as decisions taken at Community level to harmonise the classification and labelling of some substances.

- (58) The information included in the classification and labelling inventory should benefit from the same degree of accessibility and protection as that afforded by Regulation (EC) No 1907/2006, especially with regard to information which, if disclosed, risks jeopardising the commercial interests of those concerned.
- (59) Member States should appoint the competent authority or competent authorities responsible for proposals for harmonised classification and labelling and the authorities responsible for the enforcement of the obligations set out in this Regulation. Member States should put in place effective monitoring and control measures in order to ensure compliance with this Regulation.
- (60) It is important to provide advice to suppliers and any other interested parties, in particular SMEs, on their respective responsibilities and obligations under this Regulation. The national helpdesks already established under Regulation (EC) No 1907/2006 may act as the national helpdesks provided for under this Regulation.
- (61) In order for the system established by this Regulation to operate effectively, it is important that there should be good cooperation and coordination between the Member States, the Agency and the Commission.
- (62) In order to provide focal points for information on hazardous substances and mixtures, Member States should appoint bodies responsible for receiving information relating to health and to the chemical identity, components and nature of substances, including those for which the use of an alternative chemical name has been allowed in accordance with this Regulation, in addition to the competent authorities for the application and the authorities responsible for the enforcement of this Regulation.
- (63) The responsible bodies, where requested by a Member State, may undertake statistical analysis to identify where improved risk management measures might be needed.
- (64) Regular reports by the Member States and the Agency on the operation of this Regulation should be an indispensable means of monitoring the implementation of chemicals legislation as well as trends in this field. Conclusions drawn from findings in the reports should be useful and practical tools for reviewing the Regulation and, where necessary, for formulating proposals for amendments.

- (65) The Forum for the exchange of information on enforcement in the Agency, established by Regulation (EC) No 1907/2006, should also exchange information about the enforcement of this Regulation.
- (66) In order to ensure transparency, impartiality and consistency in the level of enforcement activities by Member States, it is necessary for Member States to set up an appropriate framework with a view to imposing effective, proportionate and dissuasive penalties for non-compliance with this Regulation, as non-compliance can result in damage to human health and the environment.
- (67) Rules should be laid down requiring advertisements for substances meeting the criteria for classification set out in this Regulation to mention the associated hazards, in order to protect recipients of substances, including consumers. Advertisements for mixtures classified as hazardous that allow a member of the general public to conclude a contract for purchase without first having sight of the label should mention the type or types of hazard indicated on the label, for the same reason.
- (68) A safeguard clause should be provided to address situations where a substance or a mixture constitutes a serious risk to human health or the environment, even if, in compliance with this Regulation, it is not classified as hazardous. Should such a situation occur, action at the UN level may be necessary in view of the global nature of trade in substances and mixtures.
- (69) While many of the obligations on enterprises laid down in Regulation (EC) No 1907/2006 are triggered by classification, this Regulation should not alter the scope and impact of that Regulation, except for its provisions on safety data sheets. To ensure this, that Regulation should be amended accordingly.
- (70) The application of this Regulation should be staggered to allow all parties involved, authorities, enterprises as well as stakeholders, to focus resources on preparing for new duties at the right times. Therefore, and because the classification of mixtures depends on the classification of substances, the provisions for the classification of mixtures should only be applied after the reclassification of all substances. Operators should be allowed to apply the classification criteria contained in this Regulation earlier on a voluntary basis, but in that case to avoid confusion the labelling and packaging should comply with this Regulation instead of Directives 67/548/EEC or 1999/45/EC.

- (71) To avoid unnecessary burdens on enterprises, substances and mixtures which are already in the supply chain when the labelling provisions of this Regulation become applicable to them may continue to be placed on the market without relabelling for a certain period of time.
- (72) Since the objectives of this Regulation, namely harmonising the classification, labelling and packaging rules, providing an obligation to classify and establishing a harmonised list of substances classified at Community level as well as a classification and labelling inventory, cannot be sufficiently achieved by the Member States and can therefore be better achieved at Community level, the Community may adopt measures, in accordance with the principle of subsidiarity as set out in Article 5 of the Treaty. In accordance with the principle of proportionality, as set out in that Article, this Regulation does not go beyond what is necessary in order to achieve those objectives.
- (73) This Regulation observes the fundamental rights and principles which are acknowledged in particular in the Charter of Fundamental Rights of the European Union¹.
- (74) This Regulation should contribute to the fulfilment of the Strategic Approach to International Chemical Management (SAICM) adopted on 6 February 2006 in Dubai.
- (75) Subject to developments at UN level, the classification and labelling of persistent, bioaccumulative and toxic (PBT) and very persistent and very bioaccumulative (vPvB) substances should be included in this Regulation at a later stage.
- (76) The measures necessary for the implementation of this Regulation should be adopted in accordance with Council Decision 1999/468/EC of 28 June 1999 laying down the procedures for the exercise of implementing powers conferred on the Commission¹.
- (77) In particular, the Commission should be empowered to adapt this Regulation to technical and scientific progress, including incorporating amendments made at UN level to the GHS, in particular any such UN amendments relating to the use of information on similar mixtures. In carrying out such adaptations to technical and scientific progress the biannual working rhythm at UN level should be taken into account. Furthermore, the Commission should be empowered to decide on the harmonised classification and labelling of specific

¹ OJ C 364, 18.12.2000, p. 1.

substances. Since those measures are of general scope and are designed to amend non-essential elements of this Regulation, they must be adopted in accordance with the regulatory procedure with scrutiny provided for in Article 5a of Decision 1999/468/EC.

- (78) When, on imperative grounds of urgency, the normal time-limits for the regulatory procedure with scrutiny cannot be complied with, the Commission should be able to apply the urgency procedure provided for in Article 5a(6) of Decision 1999/468/EC for the adoption of adaptations to technical progress.
- (79) The Commission should also for the purposes of this Regulation be assisted by the Committee established by Regulation (EC) No 1907/2006, with a view to ensuring a consistent approach to the updating of chemicals legislation,

HAVE ADOPTED THIS REGULATION:

TITLE I

GENERAL ISSUES

Article 1

Purpose and scope

1. The purpose of this Regulation is to ensure a high level of protection of human health and the environment as well as the free movement of substances, mixtures and articles as referred to in Article 4(8) by:
 - (a) harmonising the criteria for classification of substances and mixtures, and the rules on labelling and packaging for hazardous substances and mixtures;
 - (b) providing an obligation for:
 - (i) manufacturers, importers and downstream users to classify substances and mixtures placed on the market;
 - (ii) suppliers to label and package substances and mixtures placed on the market;

¹ OJ L 184, 17.7.1999, p. 23.

- (iii) manufacturers, producers of articles and importers to classify those substances not placed on the market that are subject to registration or notification under Regulation (EC) No 1907/2006;
 - (c) providing an obligation for manufacturers and importers of substances to notify the Agency of such classifications and label elements if these have not been submitted to the Agency as part of a registration under Regulation (EC) No 1907/2006;
 - (d) establishing a list of substances with their harmonised classifications and labelling elements at Community level in Part 3 of Annex VI;
 - (e) establishing a classification and labelling inventory of substances, which is made up of all notifications, submissions and harmonised classifications and labelling elements referred to in points (c) and (d).
2. This Regulation shall not apply to the following:
- (a) radioactive substances and mixtures within the scope of Council Directive 96/29/Euratom of 13 May 1996 laying down basic safety standards for the protection of the health of workers and the general public against the danger arising from ionising radiation¹;
 - (b) substances and mixtures which are subject to customs supervision, provided that they do not undergo any treatment or processing, and which are in temporary storage, or in a free zone or free warehouse with a view to re-exportation, or in transit;
 - (c) non-isolated intermediates;
 - (d) substances and mixtures for scientific research and development, which are not placed on the market, provided they are used under controlled conditions in accordance with Community workplace and environmental legislation.

¹ OJ L 159, 29.6.1996, p. 1.

3. Waste as defined in Directive 2006/12/EC of the European Parliament and of the Council of 5 April 2006 on waste¹ is not a substance, mixture or article within the meaning of Article 2 of this Regulation.
4. Member States may allow for exemptions from this Regulation in specific cases for certain substances or mixtures, where necessary in the interests of defence.
5. This Regulation shall not apply to substances and mixtures in the following forms, which are in the finished state, intended for the final user:
 - (a) medicinal products as defined in Directive 2001/83/EC;
 - (b) veterinary medicinal products as defined in Directive 2001/82/EC;
 - (c) cosmetic products as defined in Directive 76/768/EEC;
 - (d) medical devices as defined in Directives 90/385/EEC and 93/42/EEC, which are invasive or used in direct physical contact with the human body, and in Directive 98/79/EC;
 - (e) food or feeding stuffs as defined in Regulation (EC) No 178/2002 including when they are used:
 - (i) as a food additive in foodstuffs within the scope of Directive 89/107/EEC;
 - (ii) as a flavouring in foodstuffs within the scope of Directive 88/388/EEC and Decision 1999/217/EC;
 - (iii) as an additive in feeding stuffs within the scope of Regulation (EC) No 1831/2003;
 - (iv) in animal nutrition within the scope of Directive 82/471/EEC.
6. Save where Article 33 applies this Regulation shall not apply to the transport of dangerous goods by air, sea, road, rail or inland waterways.

¹ OJ L 114, 27.4.2006, p. 9.

Article 2
Definitions

For the purpose of this Regulation, the following definitions shall apply:

- 1) "hazard class" means the nature of the physical, health or environmental hazard;
- 2) "hazard category" means the division of criteria within each hazard class, specifying hazard severity;
- 3) "hazard pictogram" means a graphical composition that includes a symbol plus other graphic elements, such as a border, background pattern or colour that is intended to convey specific information on the hazard concerned;
- 4) "signal word" means a word that indicates the relative level of severity of hazards to alert the reader to a potential hazard; the following two levels are distinguished:
 - (a) "Danger" means a signal word indicating the more severe hazard categories;
 - (b) "Warning" means a signal word indicating the less severe hazard categories;
- 5) "hazard statement" means a phrase assigned to a hazard class and category that describes the nature of the hazards of a hazardous substance or mixture, including, where appropriate, the degree of hazard;
- 6) "precautionary statement" means a phrase that describes recommended measure(s) to minimise or prevent adverse effects resulting from exposure to a hazardous substance or mixture due to its use or disposal;
- 7) "substance" means a chemical element and its compounds in the natural state or obtained by any manufacturing process, including any additive necessary to preserve its stability and any impurity deriving from the process used, but excluding any solvent which may be separated without affecting the stability of the substance or changing its composition;
- 8) "mixture" means a mixture or solution composed of two or more substances;
- 9) "article" means an object which during production is given a special shape, surface or design which determines its function to a greater degree than does its chemical composition;

- 10) "producer of an article" means any natural or legal person who makes or assembles an article within the Community;
- 11) "polymer" means a substance consisting of molecules characterised by the sequence of one or more types of monomer units. Such molecules must be distributed over a range of molecular weights wherein differences in the molecular weight are primarily attributable to differences in the number of monomer units. A polymer comprises the following:
- (a) a simple weight majority of molecules containing at least three monomer units which are covalently bound to at least one other monomer unit or other reactant;
 - (b) less than a simple weight majority of molecules of the same molecular weight.
- In the context of this definition a "monomer unit" means the reacted form of a monomer substance in a polymer;
- 12) "monomer" means a substance which is capable of forming covalent bonds with a sequence of additional like or unlike molecules under the conditions of the relevant polymer-forming reaction used for the particular process;
- 13) "registrant" means the manufacturer or the importer of a substance or the producer or importer of an article submitting a registration for a substance under Regulation (EC) No 1907/2006;
- 14) "manufacturing" means production or extraction of substances in the natural state;
- 15) "manufacturer" means any natural or legal person established within the Community who manufactures a substance within the Community;
- 16) "import" means the physical introduction into the customs territory of the Community;
- 17) "importer" means any natural or legal person established within the Community who is responsible for import;
- 18) "placing on the market" means supplying or making available, whether in return for payment or free of charge, to a third party. Import shall be deemed to be placing on the market;

- 19) "downstream user" means any natural or legal person established within the Community, other than the manufacturer or the importer, who uses a substance, either on its own or in a mixture, in the course of his industrial or professional activities. A distributor or a consumer is not a downstream user. A re-importer exempted pursuant to Article 2(7)(c) of Regulation (EC) No 1907/2006 shall be regarded as a downstream user;
- 20) "distributor" means any natural or legal person established within the Community, including a retailer, who only stores and places on the market a substance, on its own or in a mixture, for third parties;
- 21) "intermediate" means a substance that is manufactured for and consumed in or used for chemical processing in order to be transformed into another substance (hereinafter referred to as "synthesis");
- 22) "non-isolated intermediate" means an intermediate that during synthesis is not intentionally removed (except for sampling) from the equipment in which the synthesis takes place. Such equipment includes the reaction vessel, its ancillary equipment, and any equipment through which the substance(s) pass(es) during a continuous flow or batch process as well as the pipework for transfer from one vessel to another for the purpose of the next reaction step, but it excludes tanks or other vessels in which the substance(s) are stored after the manufacture;
- 23) "the Agency" means the European Chemicals Agency established by Regulation (EC) No 1907/2006;
- 24) "competent authority" means the authority or authorities or bodies established by the Member States to carry out the obligations arising from this Regulation;
- 25) "use" means any processing, formulation, consumption, storage, keeping, treatment, filling into containers, transfer from one container to another, mixing, production of an article or any other utilisation;
- 26) "supplier" means any manufacturer, importer, downstream user or distributor placing on the market a substance, on its own or in a mixture, or a mixture;

- 27) "alloy" means a metallic material, homogeneous on a macroscopic scale, consisting of two or more elements so combined that they cannot be readily separated by mechanical means; alloys are considered to be mixtures for the purposes of this Regulation;
- 28) "UN RTDG" means the United Nations Recommendations on the Transport of Dangerous Goods;
- 29) "notifier" means the manufacturer or the importer, or group of manufacturers or importers notifying to the Agency;
- 30) "scientific research and development" means any scientific experimentation, analysis or chemical research carried out under controlled conditions;
- 31) "cut-off value" means a threshold of any classified impurity, additive or individual constituent in a substance or in a mixture, above which threshold these shall be taken into account for determining if the substance or the mixture, respectively, shall be classified;
- 32) "concentration limit" means a threshold of any classified impurity, additive or individual constituent in a substance or in a mixture that may trigger classification of the substance or the mixture, respectively;
- 33) "differentiation" means distinction within hazard classes depending on the route of exposure or the nature of the effects;
- 34) "M-factor" means a multiplying factor. It is applied to the concentration of a substance classified as hazardous to the aquatic environment acute category 1 or chronic category 1, and is used to derive by the summation method the classification of a mixture in which the substance is present;
- 35) "package" means the complete product of the packing operation, consisting of the packaging and its contents;
- 36) "packaging" means one or more receptacles and any other components or materials necessary for the receptacles to perform their containment and other safety functions;
- 37) "intermediate packaging" means packaging placed between inner packaging, or articles, and outer packaging.

Article 3
Hazardous substances and mixtures and
specification of hazard classes

A substance or a mixture fulfilling the criteria relating to physical hazards, health hazards or environmental hazards, laid down in Parts 2 to 5 of Annex I is hazardous and shall be classified in relation to the respective hazard classes provided for in that Annex.

Where, in Annex I, hazard classes are differentiated on the basis of the route of exposure or the nature of the effects, the substance or mixture shall be classified in accordance with such differentiation.

Article 4
General obligations to classify,
label and package

1. Manufacturers, importers and downstream users shall classify substances or mixtures in accordance with Title II before placing them on the market.
2. Without prejudice to the requirements of paragraph 1, manufacturers, producers of articles and importers shall classify those substances not placed on the market in accordance with Title II where:
 - (a) Articles 6, 7(1) or (5), 17 or 18 of Regulation (EC) No 1907/2006 provide for registration of a substance;
 - (b) Articles 7(2) or 9 of Regulation (EC) No 1907/2006 provide for notification.
3. If a substance is subject to harmonised classification and labelling in accordance with Title V through an entry in Part 3 of Annex VI, that substance shall be classified in accordance with that entry, and a classification of that substance in accordance with Title II shall not be performed for the hazard classes or differentiations covered by that entry.

However, where the substance also falls within one or more hazard classes or differentiations not covered by an entry in Part 3 of Annex VI, classification under Title II shall be carried out for those hazard classes or differentiations.

4. Where a substance or mixture is classified as hazardous, suppliers shall ensure that the substance or mixture is labelled and packaged in accordance with Titles III and IV, before placing it on the market.
5. In fulfilling their responsibilities under paragraph 4, distributors may use the classification for a substance or mixture derived in accordance with Title II by an actor in the supply chain.
6. In fulfilling their responsibilities under paragraphs 1 and 4, downstream users may use the classification of a substance or mixture derived in accordance with Title II by an actor in the supply chain, provided that they do not change the composition of the substance or mixture.
7. A mixture referred to in Part 2 of Annex II that contains any substance classified as hazardous shall not be placed on the market, unless it is labelled in accordance with Title III.
8. For the purposes of this Regulation, the articles referred to in section 2.1 of Annex I shall be classified, labelled and packaged in accordance with the rules for substances and mixtures before being placed on the market.
9. Suppliers in a supply chain shall cooperate to meet the requirements for classification, labelling and packaging in this Regulation.
10. Substances and mixtures shall not be placed on the market unless they comply with this Regulation.

TITLE II
HAZARD CLASSIFICATION

Chapter 1
Identification and examination of information

Article 5

*Identification and examination of available information
on substances*

1. Manufacturers, importers and downstream users of a substance shall identify the relevant available information for the purposes of determining whether the substance entails a physical, health or environmental hazard as set out in Annex I, and, in particular, the following:
 - (a) data generated in accordance with any of the methods referred to in Article 8(3);
 - (b) epidemiological data and experience on the effects on humans, such as occupational data and data from accident databases;
 - (c) any other information generated in accordance with section 1 of Annex XI to Regulation (EC) No 1907/2006;
 - (d) any new scientific information;
 - (e) any other information generated under internationally recognised chemical programmes.

The information shall relate to the forms or physical states in which the substance is placed on the market and in which it can reasonably be expected to be used.

2. Manufacturers, importers and downstream users shall examine the information referred to in paragraph 1 to ascertain whether it is adequate, reliable and scientifically valid for the purpose of the evaluation pursuant to Chapter 2 of this Title.

Article 6
Identification and examination of available information
on mixtures

1. Manufacturers, importers and downstream users of a mixture shall identify the relevant available information on the mixture itself or the substances contained in it for the purposes of determining whether the mixture entails a physical, health or environmental hazard as set out in Annex I, and, in particular, the following:
 - (a) data generated in accordance with any of the methods referred to in Article 8(3) on the mixture itself or the substances contained in it;
 - (b) epidemiological data and experience on the effects on humans for the mixture itself or the substances contained in it, such as occupational data or data from accident databases;
 - (c) any other information generated in accordance with section 1 of Annex XI to Regulation (EC) No 1907/2006 for the mixture itself or the substances contained in it;
 - (d) any other information generated under internationally recognised chemical programmes for the mixture itself or the substances contained in it.

The information shall relate to the forms or physical states in which the mixture is placed on the market and, when relevant, in which it can reasonably be expected to be used.

2. Subject to paragraphs 3 and 4, where the information referred to in paragraph 1 is available for the mixture itself, and the manufacturer, importer or downstream user has ascertained that information to be adequate and reliable and where applicable, scientifically valid, that manufacturer, importer or downstream user shall use that information for the purposes of the evaluation pursuant to Chapter 2 of this Title.
3. For the evaluation of mixtures pursuant to Chapter 2 of this Title in relation to the "germ cell mutagenicity", "carcinogenicity" and "reproductive toxicity" hazard classes referred to in sections 3.5.3.1, 3.6.3.1 and 3.7.3.1 of Annex I, the manufacturer, importer or downstream user shall only use the relevant available information referred to in paragraph 1 for the substances in the mixture.

Further, in cases where the available test data on the mixture itself demonstrate germ cell mutagenic, carcinogenic or toxic to reproduction effects which have not been identified from the information on the individual substances, those data shall also be taken into account.

4. For the evaluation of mixtures pursuant to Chapter 2 of this Title in relation to the "biodegradation and bioaccumulation" properties within the "hazardous to the aquatic environment" hazard class referred to in sections 4.1.2.8 and 4.1.2.9 of Annex I, the manufacturer, importer or downstream user shall only use the relevant available information referred to in paragraph 1 for the substances in the mixture.
5. Where no or inadequate test data on the mixture itself of the kind referred to in paragraph 1 are available, the manufacturer, importer or downstream user shall use other available information on individual substances and similar tested mixtures which may also be considered relevant for the purposes of determining whether the mixture is hazardous, provided that that manufacturer, importer or downstream user has ascertained that information to be adequate and reliable for the purpose of the evaluation pursuant to Article 9(4).

Article 7

Animal and human testing

1. Where new tests are carried out for the purposes of this Regulation, tests on animals within the meaning of Directive 86/609/EEC shall be undertaken only where no other alternatives, which provide adequate reliability and quality of data, are possible.
2. Tests on non-human primates shall be prohibited for the purposes of this Regulation.
3. Tests on humans shall not be performed for the purposes of this Regulation. Data obtained from other sources, such as clinical studies, can however be used for the purposes of this Regulation.

Article 8
Generating new information for substances
and mixtures

1. For the purposes of determining whether a substance or a mixture entails a health or environmental hazard as set out in Annex I to this Regulation, the manufacturer, importer or downstream user may, provided that he has exhausted all other means of generating information including by applying the rules provided for in section 1 of Annex XI to Regulation (EC) No 1907/2006, perform new tests.
2. For the purposes of determining whether a substance or a mixture entails any of the physical hazards referred to in Part 2 of Annex I, the manufacturer, importer or downstream user shall perform the tests required in that Part, unless there is adequate and reliable information already available.
3. The tests referred to in paragraph 1 shall be conducted in accordance with one of the following methods:
 - (a) the test methods referred to in Article 13(3) of Regulation (EC) No 1907/2006;
 - or
 - (b) sound scientific principles that are internationally recognised or methods validated according to international procedures.
4. Where the manufacturer, importer or downstream user carries out new ecotoxicological or toxicological tests and analyses, these shall be carried out in compliance with Article 13(4) of Regulation (EC) No 1907/2006.
5. Where new tests for physical hazards are carried out for the purposes of this Regulation, they shall be carried out, at the latest from 1 January 2014, in compliance with a relevant recognised quality system or by laboratories complying with a relevant recognised standard.
6. Tests that are carried out for the purposes of this Regulation shall be carried out on the substance or on the mixture in the form(s) or physical state(s) in which the substance or mixture is placed on the market and in which it can reasonably be expected to be used.

Chapter 2

Evaluation of hazard information and decision on classification

Article 9

Evaluation of hazard information for substances and mixtures

1. Manufacturers, importers and downstream users of a substance or a mixture shall evaluate the information identified in accordance with Chapter 1 of this Title by applying to it the criteria for classification for each hazard class or differentiation in Parts 2 to 5 of Annex I, so as to ascertain the hazards associated with the substance or mixture.
2. In evaluating available test data for a substance or a mixture which have been obtained from test methods other than those referred to in Article 8(3), manufacturers, importers and downstream users shall compare the test methods employed with those indicated in that Article in order to determine whether the use of those test methods affects the evaluation referred to in paragraph 1 of this Article.
3. Where the criteria cannot be applied directly to available identified information, manufacturers, importers and downstream users shall carry out an evaluation by applying a weight of evidence determination using expert judgement in accordance with section 1.1.1 of Annex I to this Regulation, weighing all available information having a bearing on the determination of the hazards of the substance or the mixture, and in accordance with section 1.2 of Annex XI to Regulation (EC) No 1907/2006.
4. Where only the information referred to in Article 6(5) is available, manufacturers, importers and downstream users shall apply the bridging principles referred to in section 1.1.3 and in each section of Parts 3 and 4 of Annex I for the purposes of the evaluation.

However, where that information permits the application neither of the bridging principles nor the principles for using expert judgement and weight of evidence determination as described in Part 1 of Annex I, manufacturers, importers and downstream users shall

evaluate the information by applying the other method or methods described in each section of Parts 3 and 4 of Annex I.

5. When evaluating the available information for the purposes of classification, the manufacturers, importers and downstream users shall consider the forms or physical states in which the substance or mixture is placed on the market and in which it can reasonably be expected to be used.

Article 10

Concentration limits and M-factors for classification of substances and mixtures

1. Specific concentration limits and generic concentration limits are limits assigned to a substance indicating a threshold at or above which the presence of that substance in another substance or in a mixture as an identified impurity, additive or individual constituent leads to the classification of the substance or mixture as hazardous.

Specific concentration limits shall be set by the manufacturer, importer or downstream user where adequate and reliable scientific information shows that the hazard of a substance is evident when the substance is present at a level below the concentrations set for any hazard class in Part 2 of Annex I or below the generic concentration limits set for any hazard class in Parts 3, 4 and 5 of Annex I;

In exceptional circumstances specific concentration limits may be set by the manufacturer, importer or downstream user where he has adequate, reliable and conclusive scientific information that a hazard of a substance classified as hazardous is not evident at a level above the concentrations set for the relevant hazard class in Part 2 of Annex I or above the generic concentration limits set for the relevant hazard class in Parts 3, 4 and 5 of that Annex.

2. M-factors for substances classified as hazardous to the aquatic environment, acute category 1 or chronic category 1, shall be established by manufacturers, importers and downstream users.
3. Notwithstanding paragraph 1, specific concentration limits shall not be set for harmonised hazard classes or differentiations for substances included in Part 3 of Annex VI.

4. Notwithstanding paragraph 2, M-factors shall not be set for harmonised hazard classes or differentiations for substances included in Part 3 of Annex VI for which an M-factor is given in that Part.

However, where an M-factor is not given in Part 3 of Annex VI for substances classified as hazardous to the aquatic environment, acute category 1 or chronic category 1, an M-factor based on available data for the substance shall be set by the manufacturer, importer or downstream user. When a mixture including the substance is classified by the manufacturer, importer or downstream user using the summation method, this M-factor shall be used.

5. In setting the specific concentration limit or M-factor manufacturers, importers and downstream users shall take into account any specific concentration limits or M-factors for that substance which have been included in the classification and labelling inventory.
6. Specific concentration limits set in accordance with paragraph 1 shall take precedence over the concentrations in the relevant sections of Part 2 of Annex I or the generic concentration limits for classification in the relevant sections of Parts 3, 4 and 5 of Annex I.
7. The Agency shall provide further guidance for the application of paragraphs 1 and 2.

Article 11

Cut-off values

1. Where a substance contains another substance, itself classified as hazardous, whether in the form of an identified impurity, additive or individual constituent, this shall be taken into account for the purposes of classification, if the concentration of the identified impurity, additive or individual constituent is equal to, or greater than, the applicable cut-off value in accordance with paragraph 3.
2. Where a mixture contains a substance classified as hazardous, whether as a component or in the form of an identified impurity or additive, this information shall be taken into account for the purposes of classification, if the concentration of that substance is equal to or greater than its cut-off value in accordance with paragraph 3.
3. The cut-off value referred to in paragraphs 1 and 2 shall be determined as set out in section 1.1.2.2 of Annex I.

Article 12

Specific cases requiring further evaluation

Where, as a result of the evaluation carried out pursuant to Article 9, the following properties or effects are identified, manufacturers, importers and downstream users shall take them into account for the purposes of classification:

- (a) adequate and reliable information demonstrates that in practice the physical hazards of a substance or a mixture differ from those shown by tests;
- (b) conclusive scientific experimental data show that the substance or mixture is not biologically available and those data have been ascertained to be adequate and reliable;
- (c) adequate and reliable scientific information demonstrates the potential occurrence of synergistic or antagonistic effects among the substances in a mixture for which the evaluation was decided on the basis of the information for the substances in the mixture.

Article 13

Decision to classify substances and mixtures

If the evaluation undertaken pursuant to Article 9 and Article 12 shows that the hazards associated with the substance or mixture meet the criteria for classification in one or more hazard classes or differentiations in Parts 2 to 5 of Annex I, manufacturers, importers and downstream users shall classify the substance or mixture in relation to the relevant hazard class or classes or differentiations by assigning the following:

- (a) one or more hazard categories for each relevant hazard class or differentiation;
- (b) subject to Article 21, one or more hazard statements corresponding to each hazard category assigned in accordance with (a).

Article 14

Specific rules for the classification of mixtures

1. The classification of a mixture shall not be affected where the evaluation of the information indicates any of the following:

- (a) that the substances in the mixture react slowly with atmospheric gases, in particular oxygen, carbon dioxide, water vapour, to form different substances at low concentration;
 - (b) that the substances in the mixture react very slowly with other substances in the mixture to form different substances at low concentration;
 - (c) that the substances in the mixture may self-polymerise to form oligomers or polymers, at low concentration.
2. A mixture need not be classified for explosive, oxidising, or flammable properties as referred to in Part 2 of Annex I provided that any of the following requirements are met:
- (a) none of the substances in the mixture possesses any of those properties and, on the basis of the information available to the supplier, the mixture is unlikely to present hazards of this kind;
 - (b) in the event of a change in the composition of a mixture, scientific evidence indicates that an evaluation of the information on the mixture will not lead to a change in classification;
 - (c) where a mixture is placed on the market in the form of an aerosol dispenser, it satisfies Article 8(1a) of Council Directive 75/324/EEC of 20 May 1975 on the approximation of the laws of the Member States relating to aerosol dispensers¹.

Article 15

Review of classification for substances and mixtures

1. Manufacturers, importers and downstream users shall take all reasonable steps available to them to make themselves aware of new scientific or technical information that may affect the classification of the substances or mixtures they place on the market. When a manufacturer, importer or downstream user becomes aware of such information which he considers to be adequate and reliable, that manufacturer, importer or downstream user shall without undue delay carry out a new evaluation in accordance with this Chapter.

¹ OJ L 147, 9.6.1975, p. 40.

2. Where the manufacturer, importer or downstream user introduces a change to a mixture that has been classified as hazardous, that manufacturer, importer or downstream user shall carry out a new evaluation in accordance with this Chapter where the change is either of the following:
 - (a) a change in the composition of the initial concentration of one or more of the hazardous constituents in concentrations at or above the limits in Table 1.2 of Part 1 of Annex I;
 - (b) a change in the composition involving the substitution or addition of one or more constituents in concentrations at or above the cut-off value referred to in Article 11(3).
3. A new evaluation in accordance with paragraphs 1 and 2 shall not be required if there is valid scientific justification that this will not result in a change of classification.
4. Manufacturers, importers and downstream users shall adapt the classification of the substance or the mixture in accordance with the results of the new evaluation except where there are harmonised hazard classes or differentiations for substances included in Part 3 of Annex VI.
5. For paragraphs 1 to 4 of this Article, when the substance or mixture concerned is within the scope of Directive 91/414/EEC or Directive 98/8/EC, the requirements of those Directives shall also apply.

Article 16

Classification of substances included in the classification and labelling inventory

1. Manufacturers and importers may classify a substance differently from the classification already included in the classification and labelling inventory, provided they submit the reasons for the classification to the Agency together with the notification in accordance with Article 40.
2. Paragraph 1 shall not apply if the classification included in the classification and labelling inventory is a harmonised classification included in Part 3 of Annex VI.

TITLE III
HAZARD COMMUNICATION IN THE FORM OF LABELLING

Chapter 1
Content of the label

Article 17

General rules

1. A substance or mixture classified as hazardous and contained in packaging shall bear a label including the following elements:
 - (a) the name, address and telephone number of the supplier(s);
 - (b) the nominal quantity of the substance or mixture in the package made available to the general public, unless this quantity is specified elsewhere on the package;
 - (c) product identifiers as specified in Article 18;
 - (d) where applicable, hazard pictograms in accordance with Article 19;
 - (e) where applicable, signal words in accordance with Article 20;
 - (f) where applicable, hazard statements in accordance with Article 21;
 - (g) where applicable, the appropriate precautionary statements in accordance with Article 22;
 - (h) where applicable, a section for supplemental information in accordance with Article 25.

2. The label shall be written in the official language(s) of the Member State(s) where the substance or mixture is placed on the market, unless the Member State(s) concerned provide(s) otherwise.

Suppliers may use more languages on their labels than those required by the Member States, provided that the same details appear in all languages used.

Article 18

Product identifiers

1. The label shall include details permitting the identification of the substance or mixture (hereinafter referred to as "product identifiers").

The term used for identification of the substance or mixture shall be the same as that used in the safety data sheet drawn up in accordance with Article 31 of Regulation (EC) No 1907/2006 (hereinafter referred to as "safety data sheet"), without prejudice to Article 17(2) of this Regulation.

2. The product identifier for a substance shall consist of at least the following:
 - (a) if the substance is included in Part 3 of Annex VI, a name and an identification number as given therein;
 - (b) if the substance is not included in Part 3 of Annex VI, but appears in the classification and labelling inventory, a name and an identification number as given therein;
 - (c) if the substance is not included in Part 3 of Annex VI nor in the classification and labelling inventory, the number provided by the CAS (hereinafter referred to as "the CAS number"), together with the name set out in the nomenclature provided by the IUPAC (hereinafter referred to as "the IUPAC Nomenclature"), or the CAS number together with another international chemical name(s); or
 - (d) if the CAS number is not available, the name set out in the IUPAC Nomenclature or another international chemical name(s).

Where the name in the IUPAC nomenclature exceeds 100 characters, one of the other names (usual name, trade name, abbreviation) referred to in section 2.1.2 of Annex VI to Regulation (EC) No 1907/2006 may be used provided that the notification in accordance with Article 40 includes both the name set out in the IUPAC Nomenclature and the other name used.

3. The product identifier for a mixture shall consist of both of the following:
 - (a) the trade name or the designation of the mixture;
 - (b) the identity of all substances in the mixture that contribute to the classification of the mixture as regards acute toxicity, skin corrosion or serious eye damage, germ cell mutagenicity, carcinogenicity, reproductive toxicity, respiratory or skin sensitisation, specific target organ toxicity (STOT) or aspiration hazard.

Where, in the case referred to in (b), that requirement leads to the provision of multiple chemical names, a maximum of four chemical names shall suffice, unless more than four names are needed to reflect the nature and the severity of the hazards.

The chemical names selected shall identify the substances primarily responsible for the major health hazards which have given rise to the classification and the choice of the corresponding hazard statements.

Article 19

Hazard pictograms

1. The label shall include the relevant hazard pictogram(s), intended to convey specific information on the hazard concerned.
2. Subject to Article 33, hazard pictograms shall fulfil the requirements laid down in section 1.2.1 of Annex I and in Annex V.
3. The hazard pictogram relevant for each specific classification is set out in the tables indicating the label elements required for each hazard class in Annex I.

Article 20

Signal words

1. The label shall include the relevant signal word in accordance with the classification of the hazardous substance or mixture.
2. The signal word relevant for each specific classification is set out in the tables indicating the label elements required for each hazard class in Parts 2 to 5 of Annex I.

3. Where the signal word "Danger" is used on the label, the signal word "Warning" shall not appear on the label.

Article 21

Hazard statements

1. The label shall include the relevant hazard statements in accordance with the classification of the hazardous substance or mixture.
2. The hazard statements relevant for each classification are set out in the tables indicating the label elements required for each hazard class in Parts 2 to 5 of Annex I.
3. Where a substance is included in Part 3 of Annex VI, the hazard statement relevant for each specific classification covered by the entry in that Part shall be used on the label, together with the hazard statements referred to in paragraph 2 for any other classification not covered by that entry.
4. The hazard statements shall be worded in accordance with Annex III.

Article 22

Precautionary statements

1. The label shall include the relevant precautionary statements.
2. The precautionary statements shall be selected from those set out in the tables in Parts 2 to 5 of Annex I indicating the label elements for each hazard class.
3. The precautionary statements shall be selected in accordance with the criteria laid down in Part 1 of Annex IV taking into account the hazard statements and the intended or identified use or uses of the substance or the mixture.
4. The precautionary statements shall be worded in accordance with Part 2 of Annex IV.

Article 23

Derogations from labelling requirements for special cases

The specific provisions on labelling laid down in section 1.3 of Annex I shall apply in respect of the following:

- (a) transportable gas cylinders;
- (b) gas containers intended for propane, butane or liquefied petroleum gas;
- (c) aerosols and containers fitted with a sealed spray attachment and containing substances or mixtures classified as presenting an aspiration hazard;
- (d) metals in massive form, alloys, mixtures containing polymers, mixtures containing elastomers;
- (e) explosives, as referred to in section 2.1 of Annex I, placed on the market with a view to obtaining an explosive or pyrotechnic effect.

Article 24

Request for use of an alternative chemical name

1. The manufacturer, importer or downstream user of a substance in a mixture may submit a request to the Agency to use an alternative chemical name which refers to that substance in a mixture either by means of a name that identifies the most important functional chemical groups or by means of an alternative designation, where the substance meets the criteria set out in Part 1 of Annex I and where he can demonstrate that disclosure on the label or in the safety data sheet of the chemical identity of that substance puts the confidential nature of his business, in particular his intellectual property rights, at risk.
2. Any request referred to in paragraph 1 of this Article shall be made in the format referred to in Article 111 of Regulation (EC) No 1907/2006 and shall be accompanied by a fee.

The level of the fees shall be determined by the Commission in accordance with the regulatory procedure referred to in Article 54(2) of this Regulation.

A reduced fee shall be set for SMEs.

3. The Agency may require further information from the manufacturer, importer or downstream user making the request if such information is necessary to take a decision. If the Agency raises no objection within six weeks of the request or the receipt of further required information, the use of the requested name shall be deemed to be allowed.
4. If the Agency does not accept the request, the practical arrangements referred to in Article 118(3) of Regulation (EC) No 1907/2006 shall apply.
5. The Agency shall inform competent authorities of the outcome of the request in accordance with paragraph 3 or 4 and provide them with the information submitted by the manufacturer, importer or downstream user.
6. Where new information shows that an alternative chemical name used does not provide sufficient information for necessary health and safety precautions to be taken at the workplace and to ensure that risks from handling the mixture can be controlled, the Agency shall review its decision on the use of that alternative chemical name. The Agency may withdraw its decision or amend it by a decision specifying which alternative chemical name is allowed to be used. If the Agency withdraws or amends its decision, the practical arrangements referred to in Article 118(3) of Regulation (EC) No 1907/2006 shall apply.
7. Where the use of an alternative chemical name has been allowed, but the classification of the substance in a mixture for which the alternative name is used no longer meets the criteria set out in section 1.4.1 of Annex I, the supplier of that substance in a mixture shall use the product identifier for the substance in accordance with Article 18 on the label and in the safety data sheet, and not the alternative chemical name.
8. For substances, whether on their own or in a mixture, where a justification in accordance with Article 10(a)(xi) of Regulation (EC) No 1907/2006 regarding information referred to in Article 119(2)(f) or (g) of that Regulation has been accepted as valid by the Agency, the manufacturer, importer or downstream user may use on the label and in the safety data sheet a name that will be made publicly available over the Internet. For those substances in a mixture for which Article 119(2)(f) or (g) of that Regulation no longer applies, the manufacturer, importer or downstream user may submit a request to the Agency to use an alternative chemical name as provided for in paragraph 1 of this Article.

9. Where the supplier of a mixture, before 1 June 2015, has demonstrated under Article 15 of Directive 1999/45/EC that the disclosure of the chemical identity of a substance in a mixture puts the confidential nature of his business at risk, he can continue to use the agreed alternative name for the purposes of this Regulation.

Article 25

Supplemental information on the label

1. Statements shall be included in the section for supplemental information on the label where a substance or mixture classified as hazardous has the physical properties or health properties referred to in sections 1.1 and 1.2 of Annex II.

The statements shall be worded in accordance with sections 1.1 and 1.2 of Annex II and Part 2 of Annex III.

Where a substance is included in Part 3 of Annex VI, any supplemental hazard statements given therein for the substance shall be included in the supplemental information on the label.

2. A statement shall be included in the section for supplemental information on the label where a substance or mixture classified as hazardous falls within the scope of Directive 91/414/EEC.

The statement shall be worded in accordance with Part 4 of Annex II and Part 3 of Annex III to this Regulation.

3. The supplier may include supplemental information in the section for supplemental information on the label other than that referred to in paragraphs 1 and 2, provided that that information does not make it more difficult to identify the label elements referred to in Article 17(1) (a) to (g) and that it provides further details and does not contradict or cast doubt on the validity of the information specified by those elements.
4. Statements such as "non-toxic", "non-harmful", "non-polluting", "ecological" or any other statements indicating that the substance or mixture is not hazardous or any other statements that are inconsistent with the classification of that substance or mixture shall not appear on the label or packaging of any substance or mixture.

6. Where a mixture contains any substance classified as hazardous, it shall be labelled in accordance with Part 2 of Annex II.

The statements shall be worded in accordance with Part 3 of Annex III and shall be placed in the supplemental information section of the label.

The label shall also include the product identifier referred to in Article 18 and the name, address and telephone number of the supplier of the mixture.

Article 26

Principles of precedence for hazard pictograms

1. Where the classification of a substance or mixture would result in more than one hazard pictogram on the label, the following rules of precedence shall apply to reduce the number of hazard pictograms required:
 - (a) if the hazard pictogram "GHS01" applies, the use of the hazard pictograms "GHS02" and "GHS03" shall be optional, except in cases where more than one of these hazard pictograms are compulsory;
 - (b) if the hazard pictogram "GHS06" applies, the hazard pictogram "GHS07" shall not appear;
 - (c) if the hazard pictogram "GHS05" applies, the hazard pictogram "GHS07" shall not appear for skin or eye irritation;
 - (d) if the hazard pictogram "GHS08" applies for respiratory sensitisation, the hazard pictogram "GHS07" shall not appear for skin sensitisation or for skin and eye irritation;
 - (e) if the hazard pictogram 'GHS02' or 'GHS06' applies, the use of the hazard pictogram 'GHS04' shall be optional.
2. Where the classification of a substance or mixture would result in more than one hazard pictogram for the same hazard class the label shall include the hazard pictogram corresponding to the most severe hazard category for each hazard class concerned.

For substances that are included in Part 3 of Annex VI and also subject to classification pursuant to Title II, the label shall include the hazard pictogram corresponding to the most severe hazard category for each relevant hazard class.

Article 27

Principles of precedence for hazard statements

If a substance or mixture is classified within several hazard classes or differentiations of a hazard class, all hazard statements resulting from the classification shall appear on the label, unless there is evident duplication or redundancy.

Article 28

Principles of precedence for precautionary statements

1. Where the selection of the precautionary statements results in certain precautionary statements being clearly redundant or unnecessary given the specific substance, mixture or packaging, such statements shall be omitted from the label.
2. Where the substance or mixture is supplied to the general public, one precautionary statement addressing the disposal of that substance or mixture as well as the disposal of packaging shall appear on the label, unless not required under Article 22.

In all other cases, a precautionary statement addressing disposal shall not be required, where it is clear that the disposal of the substance or mixture or the packaging does not present a hazard to human health or the environment.

3. Not more than six precautionary statements shall appear on the label, unless necessary to reflect the nature and the severity of the hazards.

Article 29

Exemptions from labelling and packaging requirements

1. Where the packaging of a substance or a mixture is either in such a shape or form or is so small that it is impossible to meet the requirements of Article 31 for a label in the languages of the Member State in which the substance or mixture is placed on the market,

the label elements in accordance with the first subparagraph of Article 17(2) shall be provided in accordance with section 1.5.1 of Annex I.

2. If the full label information cannot be provided in the way specified in paragraph 1 the label information may be reduced in accordance with section 1.5.2 of Annex I.
3. When a hazardous substance or mixture referred to in Part 5 of Annex II is supplied to the general public without packaging it shall be accompanied by a copy of the label elements in accordance with Article 17.
4. For certain mixtures classified as hazardous to the environment, exemptions to certain provisions on environmental labelling or specific provisions in relation to environmental labelling may be determined in accordance with the procedure referred to in Article 53, where it can be demonstrated that there would be a reduction in the environmental impact. Such exemptions or specific provisions are defined in Part 2 of Annex II.
5. The Commission may request the Agency to prepare and submit to it further draft exemptions from labelling and packaging requirements.

Article 30

Updating information on labels

1. The supplier shall ensure that the label is updated, without undue delay, following any change to the classification and labelling of that substance or mixture, where the new hazard is more severe or where new supplemental labelling elements are required under Article 25, taking into account the nature of the change as regards the protection of human health and the environment. Suppliers shall cooperate in accordance with Article 4(9) to complete the changes to the labelling without undue delay.
2. Where labelling changes are required other than those referred to in paragraph 1, the supplier shall ensure that the label is updated within 18 months.
3. The supplier of a substance or a mixture within the scope of Directives 91/414/EEC or 98/8/EC shall update the label in accordance with those Directives.

Chapter 2

Application of labels

Article 31

General rules for the application of labels

1. Labels shall be firmly affixed to one or more surfaces of the packaging immediately containing the substance or mixture and shall be readable horizontally when the package is set down normally.
2. The colour and presentation of any label shall be such that the hazard pictogram stands out clearly.
3. The label elements referred to in Article 17(1) shall be clearly and indelibly marked. They shall stand out clearly from the background and be of such size and spacing as to be easily read.
4. The shape, colour and the size of a hazard pictogram as well as the dimensions of the label shall be as set out in section 1.2.1 of Annex I.
5. A label shall not be required when the label elements referred to in Article 17(1) are shown clearly on the packaging itself. In such cases, the requirements of this Chapter applicable to a label shall be applied to the information shown on the packaging.

Article 32

Location of information on the label

1. The hazard pictograms, signal word, hazard statements and precautionary statements shall be located together on the label.
2. The supplier may decide the order of the hazard statements on the label. However, subject to paragraph 4, all hazard statements shall be grouped on the label by language.

The supplier may decide the order of the precautionary statements on the label. However, subject to paragraph 4, all precautionary statements shall be grouped on the label by language.

3. Groups of hazard statements and groups of precautionary statements referred to in paragraph 2 shall be located together on the label by language.
4. The supplemental information shall be placed in the supplemental information section referred to in Article 25, and shall be located with the other label elements specified in Article 17(1)(a) to (g).
5. In addition to its use in hazard pictograms, colour may be used on other areas of the label to implement special labelling requirements.
6. Label elements resulting from the requirements provided for in other Community acts shall be placed in the section for supplemental information on the label referred to in Article 25.

Article 33

Specific rules for labelling of outer packaging, inner packaging and single packaging

1. Where a package consists of an outer and an inner packaging, together with any intermediate packaging, and the outer packaging meets labelling provisions in accordance with the rules on the transport of dangerous goods, the inner and any intermediate packaging shall be labelled in accordance with this Regulation. The outer packaging may also be labelled in accordance with this Regulation. Where the hazard pictogram(s) required by this Regulation relate to the same hazard as in the rules for the transport of dangerous goods, the hazard pictogram(s) required by this Regulation need not appear on the outer packaging.
2. Where the outer packaging of a package is not required to meet labelling provisions in accordance with rules on the transport of dangerous goods, both the outer and any inner packaging, including any intermediate packaging, shall be labelled in accordance with this Regulation. However, if the outer packaging permits the inner or intermediate packaging labelling to be clearly seen, the outer packaging need not be labelled.

3. Single packages that meet the labelling provisions in accordance with the rules on the transport of dangerous goods shall be labelled both in accordance with this Regulation and the rules on the transport of dangerous goods. Where the hazard pictogram(s) required by this Regulation relate to the same hazard as in rules on the transport of dangerous goods, the hazard pictogram(s) required by this Regulation need not appear.

Article 34

Report on communication on safe use of chemicals

1. By 20 January 2012, the Agency shall carry out a study on the communication of information to the general public on the safe use of substances and mixtures and the potential need for additional information on labels. This study shall be carried out in consultation with competent authorities and stakeholders and drawing as appropriate on relevant best practice.
2. Without prejudice to the labelling rules provided for in this Title, the Commission shall, on the basis of the study referred to in paragraph 1, submit a report to the European Parliament and the Council and, if justified, present a legislative proposal to amend this Regulation.

TITLE IV
PACKAGING

Article 35
Packaging

1. Packaging containing hazardous substances or mixtures shall satisfy the following requirements:
 - (a) the packaging shall be designed and constructed so that its contents cannot escape, except in cases where other more specific safety devices are prescribed;
 - (b) the materials constituting the packaging and fastenings shall not be susceptible to damage by the contents, or liable to form hazardous compounds with the contents;
 - (c) the packaging and fastenings shall be strong and solid throughout to ensure that they will not loosen and will safely meet the normal stresses and strains of handling;
 - (d) packaging fitted with replaceable fastening devices shall be designed so that it can be refastened repeatedly without the contents escaping.

2. Packaging containing a hazardous substance or a mixture supplied to the general public shall not have either a shape or design likely to attract or arouse the active curiosity of children or to mislead consumers, or have a similar presentation or a design used for foodstuff or animal feeding stuff or medicinal or cosmetic products, which would mislead consumers.

Where the packaging contains a substance or mixture which meets the requirements in section 3.1.1 of Annex II it shall have a child-resistant fastening in accordance with sections 3.1.2, 3.1.3 and 3.1.4.2 of Annex II.

Where the packaging contains a substance or mixture which meets the requirements in section 3.2.1 of Annex II it shall bear a tactile warning of danger in accordance with section 3.2.2 of Annex II.

3. The packaging of substances and mixtures shall be deemed to satisfy the requirements of paragraph 1(a), (b) and (c) if it complies with the requirements of the rules on the transport of dangerous goods by air, sea, road, rail or inland waterways.

TITLE V
HARMONISATION OF CLASSIFICATION AND
LABELLING OF SUBSTANCES AND THE
CLASSIFICATION AND LABELLING INVENTORY

Chapter 1
Establishing harmonised classification and
labelling of substances

Article 36

Harmonisation of classification and labelling of substances

1. A substance that fulfils the criteria set out in Annex I for the following shall normally be subject to harmonised classification and labelling in accordance with Article 37:
 - (a) respiratory sensitisation, category 1 (Annex I, section 3.4);
 - (b) germ cell mutagenicity, category 1A, 1B or 2 (Annex I, section 3.5);
 - (c) carcinogenicity, category 1A, 1B or 2 (Annex I, section 3.6);
 - (d) reproductive toxicity, category 1A, 1B or 2 (Annex I, section 3.7).
2. A substance that is an active substance in the meaning of Directive 91/414/EEC or Directive 98/8/EC shall normally be subject to harmonised classification and labelling. For such substances, the procedures set out in Article 37, paragraphs 1, 4, 5 and 6 shall apply.
3. Where a substance fulfils the criteria for other hazard classes or differentiations than those referred to in paragraph 1 and does not fall under paragraph 2, a harmonised classification and labelling in accordance with Article 37 may also be added to Annex VI on a case-by-case basis, if justification is provided demonstrating the need for such action at Community level.

Article 37
Procedure for harmonisation of classification
and labelling of substances

1. A competent authority may submit to the Agency a proposal for harmonised classification and labelling of substances and, where appropriate, specific concentration limits or M-factors, or a proposal for a revision thereof.

The proposal shall follow the format set out in Part 2 of Annex VI and contain the relevant information provided for in Part 1 of Annex VI.

2. A manufacturer, importer or downstream user of a substance may submit to the Agency a proposal for harmonised classification and labelling of that substance and, where appropriate, specific concentration limits or M-factors, provided that there is no entry in Part 3 of Annex VI for such a substance in relation to the hazard class or differentiation covered by that proposal.

The proposal shall be drawn up in accordance with the relevant Parts of sections 1, 2 and 3 of Annex I to Regulation (EC) No 1907/2006 and it shall follow the format set out in Part B of the Chemical Safety Report of section 7 of that Annex. It shall contain the relevant information provided for in Part 1 of Annex VI to this Regulation. Article 111 of Regulation (EC) No 1907/2006 shall apply.

3. Where the proposal of the manufacturer, importer or downstream user concerns the harmonised classification and labelling of a substance in accordance with Article 36(3), it shall be accompanied by the fee determined by the Commission in accordance with the regulatory procedure referred to in Article 54(2).
4. The Committee for Risk Assessment of the Agency set up pursuant to Article 76(1)(c) of Regulation (EC) No 1907/2006 shall adopt an opinion on any proposal submitted pursuant to paragraphs 1 or 2 within 18 months of receipt of the proposal, giving the parties concerned the opportunity to comment. The Agency shall forward this opinion and any comments to the Commission.
5. Where the Commission finds that the harmonisation of the classification and labelling of the substance concerned is appropriate, it shall, without undue delay, submit a draft decision concerning the inclusion of that substance together with the relevant classification

and labelling elements in Table 3.1 of Part 3 of Annex VI and, where appropriate, the specific concentration limits or M-factors.

A corresponding entry shall be included in Table 3.2 of Part 3 of Annex VI subject to the same conditions, until 31 May 2015.

That measure, designed to amend non-essential elements of this Regulation, shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 54(3). On imperative grounds of urgency, the Commission may have recourse to the urgency procedure referred to in Article 54(4).

6. Manufacturers, importers and downstream users who have new information which may lead to a change of the harmonised classification and labelling elements of a substance in Part 3 of Annex VI shall submit a proposal in accordance with the second subparagraph of paragraph 2 to the competent authority in one of the Member States in which the substance is placed on the market.

Article 38

Content of opinions and decisions for harmonised classification and labelling in Part 3 of Annex VI; accessibility of information

1. Any opinion referred to in Article 37(4) and any decision according to Article 37(5) shall at least specify for each substance:
 - (a) the identity of the substance as specified in sections 2.1 to 2.3.4 of Annex VI to Regulation (EC) No 1907/2006;
 - (b) the classification of the substance referred to in Article 36, including a statement of reasons;
 - (c) the specific concentration limits or M-factors, where applicable;
 - (d) the label elements specified in points (d), (e) and (f) of Article 17(1) for the substance, together with any supplemental hazard statements for the substance, determined in accordance with Article 25(1);
 - (e) any other parameter enabling an assessment to be made of the health or environmental hazard of mixtures containing the hazardous substance in question or

of substances containing such hazardous substances as identified impurities, additives and constituents, if relevant.

2. When making publicly available an opinion or a decision as referred to in Article 37(4) and (5) of this Regulation, Article 118(2) and Article 119 of Regulation (EC) No 1907/2006 shall apply.

Chapter 2

Classification and labelling inventory

Article 39

Scope

This Chapter shall apply to:

- (a) substances subject to registration in accordance with Regulation (EC) No 1907/2006;
- (b) substances within the scope of Article 1 which meet the criteria for classification as hazardous and are placed on the market either on their own or in a mixture above the concentration limits specified in this Regulation or Directive 1999/45/EC, where relevant, which results in the classification of the mixture as hazardous.

Article 40

Obligation to notify the Agency

1. Any manufacturer or importer, or group of manufacturers or importers (hereinafter referred to as "the notifier(s)"), who places on the market a substance referred to in Article 39, shall notify to the Agency the following information in order for it to be included in the inventory referred to in Article 42:
 - (a) the identity of the notifier(s) responsible for placing the substance or substances on the market as specified in section 1 of Annex VI to Regulation (EC) No 1907/2006;
 - (b) the identity of the substance or substances as specified in section 2.1 to 2.3.4 to Annex VI to Regulation (EC) No 1907/2006;

- (c) the classification of the substance or substances in accordance with Article 13;
- (d) where a substance has been classified in some but not all hazard classes or differentiations, an indication of whether this is due to lack of data, inconclusive data, or data which are conclusive although insufficient for classification;
- (e) specific concentration limits or M-factors, where applicable, in accordance with Article 10 of this Regulation together with a justification using the relevant Parts of sections 1, 2 and 3 of Annex I to Regulation (EC) No 1907/2006;
- (f) the label elements specified in points (d), (e) and (f) of Article 17(1) for the substance or substances together with any supplemental hazard statements for the substance, determined in accordance with Article 25(1).

The information referred to in (a) to (f) shall not be notified, if it has been submitted to the Agency as part of a registration pursuant to Regulation (EC) No 1907/2006, or if it has already been notified by that notifier.

The notifier shall submit this information in the format specified pursuant to Article 111 of Regulation (EC) No 1907/2006.

2. The information listed in paragraph 1 shall be updated and notified to the Agency by the notifier(s) concerned when, pursuant to the review in Article 15(1), a decision to change the classification and labelling of the substance has been taken.
3. Substances placed on the market on or after 1 December 2010 shall be notified in accordance with paragraph 1 within one month after their placing on the market.

However, substances placed on the market before 1 December 2010 may be notified in accordance with paragraph 1 before that date.

Article 41

Agreed entries

Where the notification in Article 40(1) results in different entries on the inventory referred to in Article 42 for the same substance, the notifiers and registrants shall make every effort to come to an agreed entry to be included in the inventory. The notifiers shall inform the Agency accordingly.

Article 42

The classification and labelling inventory

1. The Agency shall establish and maintain a classification and labelling inventory in the form of a database.

The information notified pursuant to Article 40(1) shall be included in the inventory, as well as information submitted as part of registrations under Regulation (EC) No 1907/2006.

Information in the inventory which corresponds to the information referred to in Article 119(1) of Regulation (EC) No 1907/2006 shall be publicly accessible. The Agency shall grant access to the other information on each substance in the inventory to the notifiers and registrants who have submitted information on that substance in accordance with Article 29(1) of Regulation (EC) No 1907/2006. It shall grant access to such information to other parties subject to Article 118 of that Regulation.

2. The Agency shall update the inventory when it receives updated information in accordance with Article 40(2) or Article 41.

3. In addition to the information referred to in paragraph 1, the Agency shall, where applicable, include the following information in each entry:

- (a) whether, in respect of the entry, there is harmonised classification and labelling at Community level by inclusion in Part 3 of Annex VI;
- (b) whether, in respect of the entry, it is a joint entry between registrants of the same substance as referred to in Article 11(1) of Regulation (EC) No 1907/2006;
- (c) whether it is an agreed entry of two or more notifiers or registrants in accordance with Article 41;
- (d) whether the entry differs from another entry on the inventory for the same substance.

The information referred to in (a) shall be updated where a decision is taken in accordance with Article 37(5).

TITLE VI
COMPETENT AUTHORITIES AND ENFORCEMENT

Article 43

*Appointment of competent authorities and enforcement authorities
and cooperation between authorities*

Member States shall appoint the competent authority or competent authorities responsible for proposals for harmonised classification and labelling and the authorities responsible for the enforcement of the obligations set out in this Regulation.

The competent authorities and the authorities responsible for enforcement shall cooperate with each other in the performance of their tasks under this Regulation and shall give the corresponding authorities of other Member States all necessary and useful support to this end.

Article 44

Helpdesk

Member States shall establish national helpdesks to provide advice to manufacturers, importers, distributors, downstream users and any other interested parties on their respective responsibilities and obligations under this Regulation.

Article 45

*Appointment of bodies responsible for receiving information relating to
emergency health response*

1. Member States shall appoint a body or bodies responsible for receiving information relevant, in particular, for formulating preventative and curative measures, in particular in the event of emergency health response, from importers and downstream users placing mixtures on the market. This information shall include the chemical composition of mixtures placed on the market and classified as hazardous on the basis of their health or physical effects, including the chemical identity of substances in mixtures for which a request for use of an alternative chemical name has been accepted by the Agency, in accordance with Article 24.

2. The appointed bodies shall provide all requisite guarantees for maintaining the confidentiality of the information received. Such information may only be used:
 - (a) to meet medical demand by formulating preventative and curative measures, in particular in the event of an emergency;
 - and
 - (b) where requested by the Member State, to undertake statistical analysis to identify where improved risk management measures may be needed.

The information shall not be used for other purposes.

3. The appointed bodies shall have at their disposal all the information required from the importers and downstream users responsible for marketing to carry out the tasks for which they are responsible.
4. By 20 January 2012 the Commission shall carry out a review to assess the possibility of harmonising the information referred to in paragraph 1, including establishing a format for the submission of information by importers and downstream users to appointed bodies. On the basis of this review, and following consultation with relevant stakeholders such as the European Association of Poison Centres and Clinical Toxicologists (EAPCCT), the Commission may adopt a Regulation adding an Annex to this Regulation.

Those measures, designed to amend non-essential elements of this Regulation, by supplementing it, shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 54(3).

Article 46

Enforcement and reporting

1. Member States shall take all necessary measures, including maintaining a system of official controls, to ensure that substances and mixtures are not placed on the market, unless they have been classified, labelled, notified and packaged in accordance with this Regulation.
2. Member States shall submit a report to the Agency every five years by 1 July on the results of the official controls, and other enforcement measures taken. The first report shall be

submitted by 20 January 2012. The Agency shall make those reports available to the Commission, which shall take them into account for its report under Article 117 of Regulation (EC) No 1907/2006.

3. The Forum referred to in Article 76(1)(f) of Regulation (EC) No 1907/2006 shall undertake the tasks specified in Article 77(4)(a) to (g) of Regulation (EC) No 1907/2006 concerning enforcement of this Regulation.

Article 47

Penalties for non-compliance

Member States shall introduce penalties for non-compliance with this Regulation and shall take all measures necessary to ensure that this Regulation is applied. The penalties must be effective, proportionate and dissuasive. Member States shall notify the Commission of the provisions for penalties by 20 June 2010 and shall notify it without delay of any subsequent amendment affecting them.

TITLE VII
COMMON AND FINAL PROVISIONS

Article 48
Advertisement

1. Any advertisement for a substance classified as hazardous shall mention the hazard classes or hazard categories concerned.
2. Any advertisement for a mixture classified as hazardous or covered by Article 25(6) which allows a member of the general public to conclude a contract for purchase without first having sight of the label shall mention the type or types of hazard indicated on the label.

The first subparagraph shall be without prejudice to Directive 97/7/EC of the European Parliament and of the Council of 20 May 1997 on the protection of consumers in respect of distance contracts¹.

Article 49
Obligation to maintain information and
requests for information

1. The supplier shall assemble and keep available all the information used by that supplier for the purposes of classification and labelling under this Regulation for a period of at least ten years after the substance or the mixture was last supplied by that supplier.

The supplier shall keep this information together with the information required in Article 36 of Regulation (EC) No 1907/2006.

2. In the event of a supplier ceasing activity, or transferring part or all of his operations to a third party, the party responsible for liquidating the supplier's undertaking or assuming responsibility for the placing on the market of the substance or mixture concerned shall be bound by the obligation in paragraph 1 in place of the supplier.

¹ OJ L 144, 4.6.1997, p. 19.

3. The competent authority or the enforcement authorities of a Member State in which a supplier is established or the Agency may require the supplier to submit to it any information referred to in the first subparagraph of paragraph 1.

However, where that information is available to the Agency as part of a registration pursuant to Regulation (EC) No 1907/2006 or a notification pursuant to Article 40 of this Regulation, the Agency shall use that information and the authority shall address itself to the Agency.

Article 50

Tasks of the Agency

1. The Agency shall provide the Member States and the institutions of the Community with the best possible scientific and technical advice on questions relating to chemicals which fall within its remit and which are referred to it in accordance with this Regulation.
2. The Secretariat of the Agency shall:
 - (a) provide industry with technical and scientific guidance and tools where appropriate on how to comply with the obligations laid down by this Regulation;
 - (b) provide competent authorities with technical and scientific guidance on the operation of this Regulation and provide support to the helpdesks established by Member States under Article 44.

Article 51

Free movement clause

On grounds relating to the classification, labelling or packaging of substances and mixtures within the meaning of this Regulation, Member States shall not prohibit, restrict or impede the placing on the market of substances or mixtures which comply with this Regulation and, where appropriate, with Community acts adopted in implementation of this Regulation.

Article 52

Safeguard clause

1. Where a Member State has justifiable grounds for believing that a substance or a mixture, although satisfying the requirements of this Regulation, constitutes a serious risk to human health or the environment due to reasons of classification, labelling or packaging, it may take appropriate provisional measures. The Member State shall immediately inform the Commission, the Agency and the other Member States thereof, giving the reasons for its decision.
2. Within 60 days of receipt of the information from the Member State, the Commission shall in accordance with the regulatory procedure referred to in Article 54(2) either authorise the provisional measure for a time period defined in the decision or require the Member State to revoke the provisional measure.
3. In the case of an authorisation of a provisional measure related to classification or labelling of a substance as referred to in paragraph 2, the competent authority of the Member State concerned shall in accordance with the procedure laid down in Article 37 submit a proposal to the Agency for harmonised classification and labelling, within three months of the date of the Commission decision.

Article 53

Adaptations to technical and scientific progress

1. The Commission may adjust and adapt Articles 6(5), 11(3), 12, 14, 18(3)(b), 23, 25 to 29 and 35(2) second and third subparagraph and Annexes I to VII to technical and scientific progress, including taking due account of the further development of the GHS, in particular any UN amendments relating to the use of information on similar mixtures, and considering the developments in internationally recognised chemical programmes and of the data from accident databases. Those measures, designed to amend non-essential elements of this Regulation, shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 54(3). On imperative grounds of urgency, the Commission may have recourse to the urgency procedure referred to in Article 54(4).
2. Member States and the Commission shall, in the manner appropriate to their role in the relevant UN fora, promote the harmonisation of the criteria for classification and labelling

of persistent, bioaccumulative and toxic (PBT) and very persistent and very bioaccumulative (vPvB) substances at the level of the UN.

Article 54

Committee procedure

1. The Commission shall be assisted by the Committee instituted by Article 133 of Regulation (EC) No 1907/2006.
2. Where reference is made to this paragraph, Articles 5 and 7 of Decision 1999/468/EC shall apply, having regard to the provisions of Article 8 thereof.

The period laid down in Article 5 (6) of Decision 1999/468/EC shall be set at three months.

3. Where reference is made to this paragraph, Article 5a(1) to (4) and Article 7 of Decision 1999/468/EC shall apply, having regard to the provisions of Article 8 thereof.
4. Where reference is made to this paragraph, Article 5a(1), (2), (4) and (6) and Article 7 of Decision 1999/468/EC shall apply, having regard to the provisions of Article 8 thereof.

Article 55

Amendments to Directive 67/548/EEC

Directive 67/548/EEC shall be amended as follows:

- 1) in Article 1(2), the second subparagraph shall be deleted;
- 2) Article 4 shall be amended as follows:
 - (a) paragraph 3 shall be replaced by the following:

"3. Where an entry containing the harmonised classification and labelling for a particular substance has been included in Part 3 of Annex VI to Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures^{*}, the substance shall be classified in accordance with that entry

and paragraphs 1 and 2 shall not apply to the danger categories covered by that entry.

* OJ L 353, 31.12.2008, p. 1";

(b) paragraph 4 shall be deleted;

3) Article 5 shall be amended as follows:

(a) paragraph 1, second subparagraph shall be deleted;

(b) paragraph 2 shall be replaced by the following:

"2. The measures in the first subparagraph of paragraph 1 shall apply until the substance is listed in Part 3 of Annex VI to Regulation (EC) No 1272/2008 for the danger categories covered by that entry or until a decision not to list it has been taken in accordance with the procedure laid down in Article 37 of Regulation (EC) No 1272/2008.";

4) Article 6 shall be replaced by the following:

"Article 6

Obligation to carry out investigations

Manufacturers, distributors and importers of substances which appear in the EINECS but for which no entry has been included in Part 3 of Annex VI to Regulation (EC) No 1272/2008 shall carry out an investigation to make themselves aware of the relevant and accessible data which exist concerning the properties of such substances. On the basis of this information, they shall package and provisionally label dangerous substances according to the rules laid down in Articles 22 to 25 of this Directive and the criteria in Annex VI to this Directive.";

5) Article 22(3) and (4) shall be deleted;

6) Article 23(2) shall be amended as follows:

(a) in point (a), the words "Annex I" shall be replaced by "Part 3 of Annex VI to Regulation (EC) No 1272/2008";

- (b) in point (c), the words "Annex I" shall be replaced by "Part 3 of Annex VI to Regulation (EC) No 1272/2008";
 - (c) in point (d), the words "Annex I" shall be replaced by "Part 3 of Annex VI to Regulation (EC) No 1272/2008";
 - (d) in point (e), the words "Annex I" shall be replaced by "Part 3 of Annex VI to Regulation (EC) No 1272/2008";
 - (e) in point (f), the words "Annex I" shall be replaced by "Part 3 of Annex VI of Regulation (EC) No 1272/2008";
- 7) Article 24(4) second subparagraph shall be deleted;
 - 8) Article 28 shall be deleted;
 - 9) Article 31(2) and (3) shall be deleted;
 - 10) the following Article shall be inserted after Article 32:

"Article 32a
Transitional provision regarding labelling and packaging of substances

Articles 22 to 25 shall not apply to substances from 1 December 2010.";
 - 11) Annex I shall be deleted.

Article 56

Amendments to Directive 1999/45/EC

Directive 1999/45/EC shall be amended as follows:

- 1) in Article 3(2), first indent, the words "Annex I to Directive 67/548/EEC" shall be replaced by "Part 3 of Annex VI to Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures*.

* OJ L 353, 31.12.2008, p. 1";

2) the words "Annex I to Directive 67/548/EEC" shall be replaced by "Part 3 of Annex VI to Regulation (EC) No 1272/2008" in:

- (a) Article 3(3);
- (b) Article 10(2), points 2.3.1, 2.3.2, 2.3.3 and 2.4 first indent;
- (c) Annex II, points (a) and (b) and the last paragraph of the Introduction;
- (d) Annex II, Part A,
 - point 1.1.1 (a) and (b),
 - point 1.2 (a) and (b),
 - point 2.1.1 (a) and (b),
 - point 2.2 (a) and (b),
 - point 2.3 (a) and (b),
 - point 3.1.1 (a) and (b),
 - point 3.3 (a) and (b),
 - point 3.4 (a) and (b),
 - point 4.1.1 (a) and (b),
 - point 4.2.1 (a) and (b),
 - point 5.1.1 (a) and (b),
 - point 5.2.1 (a) and (b),
 - point 5.3.1 (a) and (b),
 - point 5.4.1 (a) and (b),
 - point 6.1 (a) and (b),

- point 6.2 (a) and (b),
 - point 7.1 (a) and (b),
 - point 7.2 (a) and (b),
 - point 8.1 (a) and (b),
 - point 8.2 (a) and (b),
 - point 9.1 (a) and (b),
 - point 9.2 (a) and (b),
 - point 9.3 (a) and (b),
 - point 9.4 (a) and (b);
- (e) Annex II, the introductory paragraph of Part B;
- (f) Annex III, point (a) and (b) of the Introduction;
- (g) Annex III, Part A, section (a) Aquatic environment
- point 1.1 (a) and (b),
 - point 2.1 (a) and (b),
 - point 3.1 (a) and (b),
 - point 4.1 (a) and (b),
 - point 5.1 (a) and (b),
 - point 6.1 (a) and (b),
- (h) Annex III, Part A, section (b) Non-aquatic environment point 1.1 (a) and (b);
- (i) Annex V, section A points 3 and 4;
- (j) Annex V, section B point 9;
- (k) Annex VI, Part A, the third column of the table under point 2;

- (l) Annex VI Part B point 1, first paragraph, and the first column of the table under point 3;
 - (m) Annex VIII, Appendix 1, second column of the table;
 - (n) Annex VIII, Appendix 2, second column of the table;
- 3) in Annex VI, Part B, point 1, paragraph 3 first indent and paragraph 5, the words "Annex I" shall be replaced by "Part 3 of Annex VI to Regulation (EC) No 1272/2008";
- 4) in Annex VI, Part B, point 4.2, final paragraph, the words "Annex I to Directive 67/548/EEC (19th adaptation)" shall be replaced by "Part 3 of Annex VI to Regulation (EC) No 1272/2008".

Article 57

Amendments to Regulation (EC) No 1907/2006

from the entry into force of this Regulation

Regulation (EC) No 1907/2006 shall be amended as from the entry into force of this Regulation as follows:

- 1) Article 14(2) shall be amended as follows:
- (a) point (b) shall be replaced by the following:
 - "(b) the specific concentration limits that have been set in Part 3 of Annex VI to Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures^{*};
 - (ba) for substances classified as hazardous to the aquatic environment, if a multiplying factor (hereinafter referred to as "M-factor") has been set in Part 3 of Annex VI to Regulation (EC) No 1272/2008, the cut-off value in Table 1.1 of Annex I to that Regulation adjusted using the calculation set out in section 4.1 of Annex I to that Regulation;

^{*} OJ L 353, 31.12.2008, p. 1";

(b) point (e) shall be replaced by the following:

"(e) the specific concentration limits given in an agreed entry in the classification and labelling inventory referred to in Article 42 of Regulation (EC) No 1272/2008;

(ea) for substances classified as hazardous to the aquatic environment, if an M-factor has been set in an agreed entry in the classification and labelling inventory referred to in Article 42 of Regulation (EC) No 1272/2008, the cut-off value in Table 1.1 of Annex I to that Regulation adjusted using the calculation set out in section 4.1 of Annex I to that Regulation;"

2) Article 31 shall be amended as follows:

(a) paragraph 8 shall be replaced by the following:

"8. A safety data sheet shall be provided free of charge on paper or electronically no later than the date on which the substance or mixture is first supplied;"

(b) the following paragraph shall be added:

"10. Where substances are classified in accordance with Regulation (EC) No 1272/2008 during the period from its entry into force until 1 December 2010, that classification may be added in the safety data sheet together with the classification in accordance with Directive 67/548/EEC.

From 1 December 2010 until 1 June 2015, the safety data sheets for substances shall contain the classification according to both Directive 67/548/EEC and Regulation (EC) No 1272/2008.

Where mixtures are classified in accordance with Regulation (EC) No 1272/2008 during the period from its entry into force until 1 June 2015, that classification may be added in the safety data sheet, together with the classification in accordance with Directive 1999/45/EC. However, until 1 June 2015, where substances or mixtures are both classified and labelled in accordance with Regulation (EC) No 1272/2008 that classification shall be provided in the safety data sheet, together with the classification in accordance

with Directives 67/548/EEC and 1999/45/EC respectively, for the substance, the mixture and its constituents.";

3) Article 56(6)(b) shall be replaced by the following:

"(b) for all other substances, below the lowest of the concentration limits specified in Directive 1999/45/EC or in Part 3 of Annex VI to Regulation (EC) No 1272/2008 which result in the classification of the mixture as dangerous.";

4) Article 59(2) and 3 shall be amended as follows:

(a) in paragraph 2, the second sentence shall be replaced by the following:

"The dossier may be limited, if appropriate, to a reference to an entry in Part 3 of Annex VI to Regulation (EC) No 1272/2008.";

(b) in paragraph 3, the second sentence shall be replaced by the following:

"The dossier may be limited, if appropriate, to a reference to an entry in Part 3 of Annex VI to Regulation (EC) No 1272/2008.";

5) in Article 76(1)(c), the words "Title XI" shall be replaced by "Title V of Regulation (EC) No 1272/2008";

6) Article 77 shall be amended as follows:

(a) in paragraph 2, the first sentence of point (e) shall be replaced by the following:

"(e) establishing and maintaining database(s) with information on all registered substances, the classification and labelling inventory and the harmonised classification and labelling list established in accordance with Regulation (EC) No 1272/2008.;"

(b) in paragraph 3, point (a), the words "Titles VI to XI" shall be replaced by "Titles VI to X";

7) Title XI shall be deleted;

8) Annex XV, sections I and II shall be amended as follows:

- (a) section I shall be amended as follows:
 - (i) the first indent shall be deleted;
 - (ii) the second indent shall be replaced by the following:
 - the identification of CMRs, PBTs, vPvBs, or a substance of equivalent concern in accordance with Article 59,";
 - (b) in section II, point 1 shall be deleted;
- 9) the table in Annex XVII shall be amended as follows:
- (a) the column "Designation of the substance, of the groups of substances or of the preparation", shall be amended as follows:
 - (i) entries 28, 29 and 30 shall be replaced by the following:
 - "28. Substances which appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 classified as carcinogen category 1A or 1B (Table 3.1) or carcinogen category 1 or 2 (Table 3.2) and listed as follows:
 - Carcinogen category 1A (Table 3.1)/carcinogen category 1 (Table 3.2) listed in Appendix 1
 - Carcinogen category 1B (Table 3.1)/carcinogen category 2 (Table 3.2) listed in Appendix 2
 - 29. Substances which appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 classified as germ cell mutagen category 1A or 1B (Table 3.1) or mutagen category 1 or 2 (Table 3.2) and listed as follows:
 - Mutagen category 1A (Table 3.1)/mutagen category 1 (Table 3.2) listed in Appendix 3
 - Mutagen category 1B (Table 3.1)/mutagen category 2 (Table 3.2) listed in Appendix 4
 - 30. Substances which appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 classified as toxic to reproduction

category 1A or 1B (Table 3.1) or toxic to reproduction category 1 or 2 (Table 3.2) and listed as follows:

- Reproductive toxicant category 1A adverse effects on sexual function and fertility or on development (Table 3.1) or reproductive toxicant category 1 with R60 (May impair fertility) or R61 (May cause harm to the unborn child) (Table 3.2) listed in Appendix 5
- Reproductive toxicant category 1B adverse effects on sexual function and fertility or on development (Table 3.1) or reproductive toxicant category 2 with R60 (May impair fertility) or R61 (May cause harm to the unborn child) (Table 3.2) listed in Appendix 6";

(b) in the column " Conditions of restriction", in entry 28, the first indent of point 1 shall be replaced by the following:

"– either the relevant specific concentration limit specified in Part 3 of Annex VI to Regulation (EC) No 1272/2008, or";

10) Appendices 1 to 6 to Annex XVII shall be amended as follows:

(a) the Foreword shall be amended as follows:

- (i) in the section entitled "Substances", the words "Annex I to Directive 67/548/EEC" shall be replaced by "Part 3 of Annex VI to Regulation (EC) No 1272/2008";
- (ii) in the section entitled "Index number", the words "Annex I to Directive 67/548/EEC" shall be replaced by "Part 3 of Annex VI to Regulation (EC) No 1272/2008";
- (iii) in the section entitled "Notes", the words "the foreword of Annex I to Directive 67/548/EEC" shall be replaced by "Part 1 of Annex VI to Regulation (EC) No 1272/2008";
- (iv) Note A shall be replaced by the following:

"Note A:

Without prejudice to Article 17(2) of Regulation (EC) No 1272/2008, the name of the substance must appear on the label in the form of one of the designations given in Part 3 of Annex VI to that Regulation.

In that Part, use is sometimes made of a general description such as "... compounds" or "... salts". In this case, the supplier who places such a substance on the market is required to state on the label the correct name, due account being taken of Section 1.1.1.4 of Annex VI to Regulation (EC) No 1272/2008.

In accordance with Regulation (EC) No 1272/2008, where a substance is included in Part 3 of Annex VI to that Regulation, the labelling elements relevant for each specific classification covered by the entry in that Part shall be included in the label, together with the applicable label elements for any other classification not covered by that entry, and any other applicable label elements in accordance with Article 17 of that Regulation.

For substances belonging to one particular group of substances included in Part 3 of Annex VI to Regulation (EC) No 1272/2008, the labelling elements relevant for each specific classification covered by the entry in that Part shall be included in the label, together with the applicable label elements for any other classification not covered by that entry, and any other applicable label elements in accordance with Article 17 of that Regulation.

For substances belonging to more than one group of substances included in Part 3 of Annex VI to Regulation (EC) No 1272/2008, the labelling elements relevant for each specific classification covered by both entries in that Part shall be included in the label, together with the applicable label elements for any other classification not covered by that entry, and any other applicable label elements in accordance with Article 17 of that Regulation. In cases where two different classifications are given in the two entries for the same hazard class or differentiation, the classification reflecting the more severe classification shall be used.";

(v) Note D shall be replaced by the following:

"Note D:

Certain substances which are susceptible to spontaneous polymerisation or decomposition are generally placed on the market in a stabilised form. It is in this form that they are listed in Part 3 of Annex VI to Regulation (EC) No 1272/2008.

However, such substances are sometimes placed on the market in a non-stabilised form. In this case, the supplier who places such a substance on the market must state on the label the name of the substance followed by the words "non-stabilised".";

(vi) Note E shall be deleted;

(vii) Note H shall be replaced by the following:

"Note H:

The classification and label shown for this substance applies to the hazard or hazards indicated by the hazard statement or hazard statements in combination with the hazard classification shown. The requirements of Article 4 of Regulation (EC) No 1272/2008 on suppliers of this substance apply to all other hazard classes, differentiations and categories.

The final label shall follow the requirements of section 1.2 of Annex I to Regulation (EC) No 1272/2008.";

(viii) Note K shall be replaced by the following:

"Note K:

The classification as a carcinogen or mutagen need not apply if it can be shown that the substance contains less than 0,1 % w/w 1,3-butadiene (Einecs No 203-450-8). If the substance is not classified as a carcinogen or mutagen, at least the precautionary statements (P102-)P210-P403 should apply. This note applies only to certain complex oil-derived substances in Part 3 of Annex VI to Regulation (EC) No 1272/2008.";

(ix) Note S shall be replaced by the following:

"Note S:

This substance may not require a label according to Article 17 of Regulation (EC) No 1272/2008 (see section 1.3 of Annex I to that Regulation).";

(b) in Appendix 1, the title shall be replaced by the following:

"Point 28 – Carcinogens: category 1A (Table 3.1)/category 1 (Table 3.2)";

(c) Appendix 2 shall be amended as follows:

(i) the title shall be replaced by "Point 28 – Carcinogens: category 1B (Table 3.1)/category 2 (Table 3.2)";

(ii) in the entries index Nos. 024-017-00-8, 611-024-001, 611-029-00-9, 611-030-00-4 and 650-017-00-8, the words "Annex I to Directive 67/548/EEC" shall be replaced by "Annex VI to Regulation (EC) No 1272/2008.";

(d) in Appendix 3, the title shall be replaced by the following:

"Point 29 – Mutagens: category 1A (Table 3.1)/category 1 (Table 3.2)";

(e) in Appendix 4, the title shall be replaced by the following:

"Point 29 – Mutagens: category 1B (Table 3.1)/category 2 (Table 3.2)";

(f) in Appendix 5, the title shall be replaced by the following:

"Point 30 – Reproductive toxicants: category 1A (Table 3.1)/category 1 (Table 3.2)";

(g) in Appendix 6, the title shall be replaced by the following:

"Point 30 – Reproductive toxicants: category 1B (Table 3.1)/category 2 (Table 3.2)";

11) the word "preparation" or "preparations" within the meaning of Article 3 (2) of Regulation (EC) 1907/2006 shall be replaced by "mixture" or "mixtures" respectively throughout the text.

Article 58
Amendments to Regulation (EC) No 1907/2006 from
1 December 2010

Regulation (EC) No 1907/2006 shall be amended from 1 December 2010 as follows:

1) in Article 14(4), the introductory sentence shall be replaced by the following:

"4. If, as a result of carrying out steps (a) to (d) of paragraph 3, the registrant concludes that the substance fulfils the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008:

(a) hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F;

(b) hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10;

(c) hazard class 4.1;

(d) hazard class 5.1,

or is assessed to be a PBT or vPvB, the chemical safety assessment shall include the following additional steps:"

2) Article 31 shall be amended as follows

(a) paragraph 1(a) shall be replaced by the following:

"(a) where a substance meets the criteria for classification as hazardous in accordance with Regulation (EC) No 1272/2008 or a mixture meets the criteria for classification as dangerous in accordance with Directive 1999/45/EC; or";

(b) paragraph 4 shall be replaced by the following:

"4. The safety data sheet need not be supplied where substances that are hazardous in accordance with Regulation (EC) No 1272/2008 or mixtures that are dangerous in accordance with Directive 1999/45/EC, offered or sold to the general public, are provided with sufficient information to enable users to take

the necessary measures as regards the protection of human health, safety and the environment, unless requested by a downstream user or distributor.";

3) Article 40(1) shall be replaced by the following:

"1. The Agency shall examine any testing proposal set out in a registration or a downstream user report for provision of the information specified in Annexes IX and X for a substance. Priority shall be given to registrations of substances which have or may have PBT, vPvB, sensitising and/or carcinogenic, mutagenic or toxic for reproduction (CMR) properties, or substances above 100 tonnes per year with uses resulting in widespread and diffuse exposure, provided they fulfil the criteria for any of the following hazard classes or categories set out in Annex I of Regulation (EC) No 1272/2008:

- (a) hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F;
- (b) hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10;
- (c) hazard class 4.1;
- (d) hazard class 5.1.";

4) Article 57(a), (b) and (c) shall be replaced by the following:

- "(a) substances meeting the criteria for classification in the hazard class carcinogenicity category 1A or 1B in accordance with section 3.6 of Annex I to Regulation (EC) No 1272/2008;
- (b) substances meeting the criteria for classification in the hazard class germ cell mutagenicity category 1A or 1B in accordance with section 3.5 of Annex I to Regulation (EC) No 1272/2008;
- (c) substances meeting the criteria for classification in the hazard class reproductive toxicity category 1A or 1B, adverse effects on sexual function and fertility or on development in accordance with section 3.7 of Annex I to Regulation(EC) No 1272/2008;"

- 5) in Article 65 the words "Directive 67/548/EEC" shall be replaced by "Directive 67/548/EEC and Regulation (EC) No 1272/2008";
- 6) Article 68(2) shall be replaced by the following:
- "2. For a substance on its own, in a mixture or in an article which meets the criteria for classification in the hazard classes carcinogenicity, germ cell mutagenicity or reproductive toxicity, category 1A or 1B, and could be used by consumers and for which restrictions to consumer use are proposed by the Commission, Annex XVII shall be amended in accordance with the procedure referred to in Article 133(4). Articles 69 to 73 shall not apply.";
- 7) Article 119 shall be amended as follows:
- (a) in paragraph 1, point (a) shall be replaced by the following:
- "(a) without prejudice to paragraph 2(f) and (g) of this Article, the name in the IUPAC nomenclature for substances fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008:
- hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F;
 - hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10;
 - hazard class 4.1;
 - hazard class 5.1.";
- (b) paragraph 2 shall be amended as follows:
- (i) point (f) shall be replaced by the following:
- "(f) subject to Article 24 of Regulation (EC) No 1272/2008, the name in the IUPAC nomenclature for non-phase-in substances referred to in paragraph 1(a) of this Article for a period of six years;"

(ii) in point (g), the introductory phrase shall be replaced by the following:

"(g) subject to Article 24 of Regulation (EC) No 1272/2008, the name in the IUPAC nomenclature for substances referred to in paragraph 1(a) of this Article that are only used as one or more of the following:";

8) in Article 138(1), the second sentence of the introductory phrase shall be replaced by the following:

"However, for substances meeting the criteria for classification in the hazard classes carcinogenicity, germ cell mutagenicity or reproductive toxicity, category 1A or 1B, in accordance with Regulation (EC) No 1272/2008, the review shall be carried out by 1 June 2014.";

9) Annex III shall be amended as follows:

(a) point (a) shall be replaced by the following:

"(a) substances for which it is predicted (i.e. by the application of (Q)SARs or other evidence) that they are likely to meet the criteria for category 1A or 1B classification in the hazard classes carcinogenicity, germ cell mutagenicity or reproductive toxicity or the criteria in Annex XIII;"

(b) in point (b), point (ii) shall be replaced by the following:

"(ii) for which it is predicted (i.e. by application of (Q)SARs or other evidence) that they are likely to meet the classification criteria for any health or environmental hazard classes or differentiations under Regulation (EC) No 1272/2008.";

10) in Annex V, point 8, the words "Directive 67/548/EEC" shall be replaced by "Regulation (EC) No 1272/2008";

11) in Annex VI, sections 4.1, 4.2 and 4.3 shall be replaced by the following:

"4.1 The hazard classification of the substance(s), resulting from the application of Title I and II of Regulation (EC) No 1272/2008 for all hazard classes and categories in that Regulation,

In addition, for each entry, the reasons why no classification is given for a hazard class or differentiation of a hazard class should be provided (i.e. if data are lacking, inconclusive, or conclusive but not sufficient for classification),

- 4.2 The resulting hazard label for the substance(s), resulting from the application of Title III of Regulation (EC) No 1272/2008,
- 4.3 Specific concentration limits, where applicable, resulting from the application of Article 10 of Regulation (EC) No 1272/2008 and Articles 4 to 7 of Directive 1999/45/EC.";

12) Annex VIII shall be amended as follows:

- (a) in column 2, the second indent of point 8.4.2 shall be replaced by the following:

"– the substance is known to be carcinogenic category 1A or 1B or germ cell mutagenic category 1A, 1B or 2.";

- (b) in column 2, the second and third paragraphs of point 8.7.1 shall be replaced by the following:

"If a substance is known to have an adverse effect on fertility, meeting the criteria for classification as toxic for reproduction category 1A or 1B: May damage fertility (H360F), and the available data are adequate to support a robust risk assessment, then no further testing for fertility will be necessary. However, testing for developmental toxicity must be considered.

If a substance is known to cause developmental toxicity, meeting the criteria for classification as toxic for reproduction category 1A or 1B: May damage the unborn child (H360D), and the available data are adequate to support a robust risk assessment, then no further testing for developmental toxicity will be necessary. However, testing for effects on fertility must be considered.";

13) in Annex IX, column 2, point 8.7, the second and third paragraphs of the third indent shall be replaced by the following:

"If a substance is known to have an adverse effect on fertility, meeting the criteria for classification as toxic for reproduction category 1A or 1B: May damage fertility (H360F),

and the available data are adequate to support a robust risk assessment, then no further testing for fertility will be necessary. However, testing for developmental toxicity must be considered.

If a substance is known to cause developmental toxicity, meeting the criteria for classification as toxic for reproduction category 1A or 1B: May damage the unborn child (H360D), and the available data are adequate to support a robust risk assessment, then no further testing for developmental toxicity will be necessary. However, testing for effects on fertility must be considered.";

14) Annex X shall be amended as follows:

(a) in column 2, point 8.7, the second and third paragraphs of the third indent shall be replaced by the following:

"If a substance is known to have an adverse effect on fertility, meeting the criteria for classification as toxic for reproduction category 1A or 1B: May damage fertility (H360F), and the available data are adequate to support a robust risk assessment, then no further testing for fertility will be necessary. However, testing for developmental toxicity must be considered.

If a substance is known to cause developmental toxicity, meeting the criteria for classification as toxic for reproduction category 1A or 1B: May damage the unborn child (H360D), and the available data are adequate to support a robust risk assessment, then no further testing for developmental toxicity will be necessary. However, testing for effects on fertility must be considered."

(b) in column 2, point 8.9.1, the second indent of the first paragraph shall be replaced by the following:

"– the substance is classified as germ cell mutagen category 2 or there is evidence from the repeated dose study(ies) that the substance is able to induce hyperplasia and/or pre-neoplastic lesions."

(c) in column 2, the second paragraph of point 8.9.1 shall be replaced by the following:

"If the substance is classified as germ cell mutagen category 1A or 1B, the default presumption would be that a genotoxic mechanism for carcinogenicity is likely. In these cases, a carcinogenicity test will normally not be required.";

15) in Annex XIII, the second and third indents of point 1.3 shall be replaced by the following:

- "– the substance is classified as carcinogenic (category 1A or 1B), germ cell mutagenic (category 1A or 1B), or toxic for reproduction (category 1A, 1B or 2), or
- there is other evidence of chronic toxicity, as identified by the classifications STOT (repeated exposure), category 1 (oral, dermal, inhalation of gases/vapours, inhalation of dust/mist/fume) or category 2 (oral, dermal, inhalation of gases/vapours, inhalation of dust/mist/fume) according to Regulation (EC) No 1272/2008";

16) in the table in Annex XVII, the column "Designation of the substance, of the groups of substances or of the mixture" shall be amended as follows:

(a) entry 3 shall be replaced by the following:

"3. Liquid substances or mixtures which are regarded as dangerous in accordance with Directive 1999/45/EC or are fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008:

- (a) hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F;
- (b) hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10;
- (c) hazard class 4.1;
- (d) hazard class 5.1.";

(b) entry 40 shall be replaced by the following:

"40. Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures

which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to that Regulation or not."

Article 59

Amendments to Regulation (EC) No 1907/2006

from 1 June 2015

Regulation (EC) No 1907/2006 shall be amended from 1 June 2015 as follows:

- 1) Article 14(2) shall be replaced by the following:
 - "2. A chemical safety assessment in accordance with paragraph 1 need not be performed for a substance which is present in a mixture if the concentration of the substance in the mixture is less than
 - (a) the cut-off value referred to in Article 11, paragraph 3 of Regulation (EC) No 1272/2008;
 - (f) 0,1 % weight by weight (w/w), if the substance meets the criteria in Annex XIII to this Regulation."
- 2) Article 31 shall be amended as follows:
 - (a) in paragraph 1, point (a) shall be replaced by the following:
 - "(a) where a substance or mixture meets the criteria for classification as hazardous in accordance with Regulation (EC) No 1272/2008; or";
 - (b) paragraph 3 shall be replaced by the following:
 - "3. The supplier shall provide the recipient at his request with a safety data sheet compiled in accordance with Annex II, where a mixture does not meet the criteria for classification as hazardous in accordance with Titles I and II of Regulation (EC) No 1272/2008, but contains:

- (a) in an individual concentration of • 1 % by weight for non-gaseous mixtures and • 0,2 % by volume for gaseous mixtures at least one substance posing human health or environmental hazards; or
- (b) in an individual concentration of • 0,1 % by weight for non-gaseous mixtures at least one substance that is carcinogenic category 2 or toxic to reproduction category 1A, 1B and 2, skin sensitiser category 1, respiratory sensitiser category 1, or has effects on or via lactation or is persistent, bioaccumulative and toxic (PBT) in accordance with the criteria set out in Annex XIII or very persistent and very bioaccumulative (vPvB) in accordance with the criteria set out in Annex XIII or has been included for reasons other than those referred to in point (a) in the list established in accordance with Article 59(1); or
- (c) a substance for which there are Community workplace exposure limits";

(c) paragraph 4 shall be replaced by the following:

"4. The safety data sheet need not be supplied where hazardous substances or mixtures offered or sold to the general public are provided with sufficient information to enable users to take the necessary measures as regards the protection of human health, safety and the environment, unless requested by a downstream user or distributor.";

3) Article 56(6)(b) shall be replaced by the following:

"(b) for all other substances, below the values specified in Article 11(3) of Regulation (EC) No 1272/2008 which result in the classification of the mixture as hazardous.";

4) in Article 65 the words "and Directive 1999/45/EC" shall be deleted;

5) Annex II shall be amended as follows:

(a) point 1.1 shall be replaced by:

"1.1. Identification of the substance or mixture

The term used for identification of a substance shall be identical to that provided on the label in accordance with Article 18(2) of Regulation (EC) No 1272/2008.

The term used for identification of a mixture shall be identical to that provided on the label in accordance with Article 18(3)(a) of Regulation (EC) No 1272/2008.";

(b) footnote 1 to point 3.3(a), first indent, shall be deleted;

(c) point 3.6 shall be replaced by:

"3.6. Where, in accordance with Article 24 of Regulation (EC) No 1272/2008, the Agency has agreed that the chemical identity of a substance may be kept confidential on the label and in the safety data sheet, their chemical nature shall be described under heading 3 in order to ensure safe handling.

The name used on the safety data sheet (including for the purposes of paragraphs 1.1, 3.2, 3.3 and 3.5) shall be the same as that used on the label, agreed in accordance with the procedure set out in Article 24 of Regulation (EC) No 1272/2008.";

6) in Annex VI section 4.3 shall be replaced by the following:

"4.3 Specific concentration limits, where applicable, resulting from the application of Article 10 of Regulation (EC) No 1272/2008.";

7) Annex XVII shall be amended as follows:

(a) in the column "Designation of the substance, of the group or of the mixture" of the table in entry 3, the words "which are regarded as dangerous in accordance with Directive 1999/45/EC or are" shall be deleted;

(b) in the column "Conditions of restriction" of the table, entry 28 shall be amended as follows:

(i) the second indent of point 1 shall be replaced by the following:

"– the relevant generic concentration limit specified in Part 3 of Annex I of Regulation (EC) No 1272/2008.";

(ii) point 2 (d) shall be replaced by the following:

"(d) artists' paints covered by Regulation (EC) No 1272/2008."

Article 60

Repeal

Directive 67/548/EEC and Directive 1999/45/EC shall be repealed with effect from 1 June 2015.

Article 61

Transitional provisions

1. Until 1 December 2010, substances shall be classified, labelled and packaged in accordance with Directive 67/548/EEC.

Until 1 June 2015, mixtures shall be classified, labelled and packaged in accordance with Directive 1999/45/EC.

2. By way of derogation from the second subparagraph of Article 62 of this Regulation and in addition to the requirements of paragraph 1 of this Article, substances and mixtures may, before 1 December 2010 and 1 June 2015 respectively, be classified, labelled and packaged in accordance with this Regulation. In that case, the provisions on labelling and packaging in Directives 67/548/EEC and 1999/45/EC shall not apply.

3. From 1 December 2010 until 1 June 2015, substances shall be classified in accordance with both Directive 67/548/EEC and this Regulation. They shall be labelled and packaged in accordance with this Regulation.

4. By way of derogation from the second subparagraph of Article 62 of this Regulation, substances classified, labelled and packaged in accordance with Directive 67/548/EEC and already placed on the market before 1 December 2010, are not required to be relabelled and repackaged in accordance with this Regulation until 1 December 2012.

By way of derogation from the second subparagraph of Article 62 of this Regulation, mixtures classified, labelled and packaged in accordance with Directive 1999/45/EC and

already placed on the market before 1 June 2015 are not required to be relabelled and repackaged in accordance with this Regulation until 1 June 2017.

5. Where a substance or mixture has been classified in accordance with Directive 67/548/EEC or 1999/45/EC before 1 December 2010 or 1 June 2015 respectively, manufacturers, importers and downstream users may amend the classification of the substance or mixture using the conversion table in Annex VII to this Regulation.
6. Until 1 December 2011 a Member State may maintain any existing and more stringent classification and labelling of substances entered into Part 3 of Annex VI to this Regulation, provided that these classifications and labelling elements have been notified to the Commission in accordance with the safeguard clause in Directive 67/548/EEC before 20 January 2009 and that the Member State submits a proposal for harmonised classification and labelling containing these classifications and labelling elements to the Agency in accordance with Article 37(1) of this Regulation by 1 June 2009.

It is a precondition that a decision on the proposed classification and labelling by the Commission in accordance with the safeguard clause of Directive 67/548/EEC has not yet been taken before ... *

If the proposed harmonised classification and labelling submitted under the first subparagraph is not included or is included in an amended form in Part 3 of Annex VI in accordance with Article 37(5), the exemption in the first subparagraph of this paragraph is no longer valid.

Article 62

Entry into force

This Regulation shall enter into force on the twentieth day following that of its publication in the Official Journal of the European Union.

Titles II, III and IV shall apply in respect of substances from 1 December 2010 and in respect of mixtures from 1 June 2015.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Strasbourg,

For the European Parliament

The President

For the Council

The President

ANNEX I

Classification and labelling requirements for hazardous substances and mixtures

This annex sets out the criteria for classification in hazard classes and in their differentiations and sets out additional provisions on how the criteria may be met.

1. PART 1: GENERAL PRINCIPLES FOR CLASSIFICATION AND LABELLING

1.0. DEFINITIONS

Gas means a substance which:

- (i) at 50°C has a vapour pressure greater than 300 kPa (absolute); or
- (ii) is completely gaseous at 20°C at a standard pressure of 101,3 kPa;

Liquid means a substance or mixture which:

- (i) at 50°C has a vapour pressure of not more than 300 kPa (3 bar);
- (ii) is not completely gaseous at 20°C and at a standard pressure of 101,3 kPa; and
- (iii) which has a melting point or initial melting point of 20°C or less at a standard pressure of 101,3 kPa;

Solid means a substance or mixture which does not meet the definitions of liquid or gas.

1.1. CLASSIFICATION OF SUBSTANCES AND MIXTURES

1.1.0. Cooperation to meet the requirements in this Regulation

Suppliers in a supply chain shall cooperate to meet the requirements for classification, labelling and packaging set out in this Regulation.

Suppliers in an industry sector may cooperate to manage the transitional arrangements in Article 61 for substances and mixtures placed on the market.

Suppliers in an industry sector may cooperate through formation of a network or by other means to share data and expertise when classifying substances and mixtures in accordance with Title II of this Regulation. In these circumstances suppliers in an industry sector shall document fully the basis on which classification decisions are made and shall make available to the competent authorities and, on request, to the relevant enforcement authorities the documentation, together with the data and information on which classifications are based. However, where suppliers in an industry sector cooperate in this way, each supplier shall remain fully responsible for the classification, labelling and packaging of substances and mixtures he places on the market, and for meeting any other requirements of this Regulation.

The network may also be used to exchange information and best practices with a view to simplifying fulfilment of the notification obligations.

1.1.1. The role and application of expert judgement and weight of evidence determination

- 1.1.1.1. Where the criteria cannot be applied directly to available identified information, or where only the information referred to in Article 6(5) is available, the weight of evidence determination using expert judgment shall be applied in accordance with Article 9(3) or 9(4) respectively.
- 1.1.1.2. The approach to classifying mixtures may include the application of expert judgement in a number of areas in order to ensure existing information can be used for as many mixtures as possible in order to provide protection for human health and the environment. Expert judgement may also be required in interpreting data for hazard classification of substances, especially where weight of evidence determinations are needed.
- 1.1.1.3. A weight of evidence determination means that all available information bearing on the determination of hazard is considered together, such as the results of suitable in vitro tests, relevant animal data, information from the application of the category approach (grouping, read-across), (Q)SAR results, human experience such as occupational data and data from accident databases, epidemiological and clinical studies and well-documented case reports and observations. The quality and consistency of the data shall be given appropriate weight. Information on substances or mixtures related to the substance or mixture being classified shall be considered as appropriate, as well as site of action and mechanism or

mode of action study results. Both positive and negative results shall be assembled together in a single weight of evidence determination.

- 1.1.1.4. For the purpose of classification for health hazards (Part 3) established hazardous effects seen in appropriate animal studies or from human experience that are consistent with the criteria for classification shall normally justify classification. Where evidence is available from both humans and animals and there is a conflict between the findings, the quality and reliability of the evidence from both sources shall be evaluated in order to resolve the question of classification. Generally, adequate, reliable and representative data on humans (including epidemiological studies, scientifically valid case studies as specified in this Annex or statistically backed experience) shall have precedence over other data. However, even well-designed and conducted epidemiological studies may lack a sufficient number of subjects to detect relatively rare but still significant effects, to assess potentially confounding factors. Therefore, positive results from well-conducted animal studies are not necessarily negated by the lack of positive human experience but require an assessment of the robustness, quality and statistical power of both the human and animal data.
- 1.1.1.5. For the purpose of classification for health hazards (Part 3) route of exposure, mechanistic information and metabolism studies are pertinent to determining the relevance of an effect in humans. When such information, as far as there is reassurance about the robustness and quality of the data, raises doubt about relevance in humans, a lower classification may be warranted. When there is scientific evidence that the mechanism or mode of action is not relevant to humans, the substance or mixture should not be classified.

1.1.2. Specific concentration limits, M-factors and generic cut-off values

- 1.1.2.1. Specific concentration limits or M-factors shall be applied in accordance with Article 10.

1.1.2.2. *Cut-off values*

- 1.1.2.2.1. Cut-off values indicate when the presence of a substance needs to be taken into account for the purposes of classification of a substance or a mixture containing that hazardous substance, whether as an identified impurity, additive, or individual constituent (see Article 11).

- 1.1.2.2.2. The cut-off values referred to in Article 11 shall be the following:

- (a) For health and environmental hazards in Parts 3, 4 and 5 of this Annex:
- (i) for substances where a specific concentration limit is set for the relevant hazard class or differentiation either in Part 3 of Annex VI or in the classification and labelling inventory referred to in Article 42, and where the hazard class or differentiation is mentioned in Table 1.1, the lower of the specific concentration limit and the relevant generic cut-off value in Table 1.1; or
 - (ii) for substances where a specific concentration limit is set for the relevant hazard class or differentiation either in Part 3 of Annex VI or in the classification and labelling inventory referred to in Article 42, and where the hazard class or differentiation is not mentioned in Table 1.1, the specific concentration limit set either in Part 3 of Annex VI or in the classification and labelling inventory; or
 - (iii) for substances where no specific concentration limit is set for the relevant hazard class or differentiation either in Part 3 of Annex VI or in the classification and labelling inventory referred to in Article 42, and where the hazard class or differentiation is mentioned in Table 1.1, the relevant generic cut-off value set out in that table; or
 - (iv) for substances where no specific concentration limit is set for the relevant hazard class or differentiation either in Part 3 of Annex VI or in the classification and labelling inventory referred to in Article 42, and where the hazard class or differentiation is not mentioned in Table 1.1, the generic concentration limit for classification in the relevant sections of Parts 3, 4 and 5 of this Annex.
- (b) For aquatic environmental hazards in section 4.1 of this Annex:
- (i) for substances where an M-factor has been set for the relevant hazard category either in Part 3 of Annex VI, or in the classification and labelling inventory referred to in Article 42, the generic cut-off value in Table 1.1 adjusted using the calculation set out in section 4.1 of this Annex; or

- (ii) for substances where no M-factor is set for the relevant hazard category either in Part 3 of Annex VI or in the classification and labelling inventory referred to in Article 42, the relevant generic cut-off value set out in Table 1.1.

Table 1.1
Generic cut-off values

Hazard class	Generic cut-off values to be taken into account
Acute Toxicity:	
– Category 1-3	0,1 %
– Category 4	1 %
Skin corrosion/Irritation	1 % ¹
Serious damage to eyes/eye irritation	1 % ²
Hazardous to Aquatic Environment	
– Acute Category 1	0,1 % ³
– Chronic Category 1	0,1 % ⁴
– Chronic Category 2-4	1 %

Note:

Generic cut-off values are in weight percentages except for gaseous mixtures for those hazard classes where the generic cut-off values may be best described in volume percentages.

1.1.3. Bridging principles for the classification of mixtures where test data are not available for the complete mixture

Where the mixture itself has not been tested to determine its hazardous properties, but there are sufficient data on similar tested mixtures and individual hazardous ingredient substances to adequately characterise the hazards of the mixture, these data shall be used in accordance with the following bridging rules referred to in Article 9(4) for each individual

¹ Or < 1 % where relevant, see 3.2.3.3.1.

² Or < 1 % where relevant, see 3.3.3.3.1.

³ Or < 0,1 % where relevant, see 4.1.3.1.

⁴ Or < 0,1 % where relevant, see 4.1.3.1.

hazard class in Part 3 and Part 4 of this Annex, subject to any specific provisions for mixtures in each hazard class.

1.1.3.1. Dilution

If a tested mixture is diluted with a substance (diluent) which has an equivalent or lower hazard category classification than the least hazardous original ingredient substance and which is not expected to affect the hazard classification of other ingredient substances, then one of the following shall be applied:

- the new mixture shall be classified as equivalent to the original mixture;
- the method explained in each section of Part 3 and in Part 4 for classification of mixtures when data are available for all components or only some components of the mixture;
- in the case of acute toxicity, the method for classification of mixtures based on ingredients of the mixture (additivity formula).

1.1.3.2. Batching

The hazard category of a tested production batch of a mixture can be assumed to be substantially equivalent to that of another untested production batch of the same commercial product, when produced by or under the control of the same supplier, unless there is reason to believe there is significant variation such that the hazard classification of the untested batch has changed. If the latter occurs, a new evaluation is necessary.

1.1.3.3. Concentration of highly hazardous mixtures

In the case of the classification of mixtures covered by sections 3.1, 3.2, 3.3, 3.8, 3.9, 3.10 and 4.1, if a tested mixture is classified in the highest hazard category or sub-category, and the concentration of the components of the tested mixture that are in that category or sub-category is increased, the resulting untested mixture shall be classified in that category or sub-category without additional testing.

1.1.3.4. Interpolation within one toxicity category

In the case of the classification of mixtures covered by sections 3.1, 3.2, 3.3, 3.8, 3.9, 3.10 and 4.1, for three mixtures (A, B and C) with identical components, where mixtures A and

B have been tested and are in the same hazard category, and where untested mixture C has the same hazardous components as mixture A and B but has concentrations of those hazardous components intermediate to the concentrations in mixtures A and B, then mixture C is assumed to be in the same hazard category as A and B.

1.1.3.5. *Substantially similar mixtures*

Given the following:

- (a) two mixtures each containing two ingredients:
 - (i) A + B
 - (ii) C + B;
- (b) the concentration of ingredient B is essentially the same in both mixtures;
- (c) the concentration of ingredient A in mixture (i) equals that of ingredient C in mixture (ii);
- (d) hazard data for A and C are available and substantially equivalent, i.e. they are in the same hazard category and are not expected to affect the hazard classification of B.

If mixture (i) or (ii) is already classified based on test data, then the other mixture shall be assigned the same hazard category.

1.1.3.6. *Review of classification where the composition of a mixture has changed*

The following variations in initial concentration are defined for the application of Article 15(2)(a):

Table 1.2
Bridging Principle for changes in the composition of a mixture

Initial concentration range of the constituent	Permitted variation in initial concentration of the constituent
$\leq 2,5 \%$	$\pm 30 \%$

$2,5 < C \leq 10 \%$	$\pm 20 \%$
$10 < C \leq 25 \%$	$\pm 10 \%$
$25 < C \leq 100 \%$	$\pm 5 \%$

1.1.3.7. *Aerosols*

In the case of the classification of mixtures covered by sections 3.1, 3.2, 3.3, 3.4, 3.8 and 3.9, an aerosol form of a mixture shall be classified in the same hazard category as the non-aerosolised form of the mixture, provided that the added propellant does not affect the hazardous properties of the mixture upon spraying and scientific evidence is available demonstrating that the aerosolised form is not more hazardous than the nonaerosolised form.

1.2. LABELLING

1.2.1. General rules for the application of labels required by Article 31

1.2.1.1. Hazard pictograms shall be in the shape of a square set at a point.

1.2.1.2. Hazard pictograms as laid down in Annex V shall have a black symbol on a white background with a red frame sufficiently wide to be clearly visible.

1.2.1.3. Each hazard pictogram shall cover at least one fifteenth of the minimum surface area of the label dedicated to the information required by Article 17. The minimum area of each hazard pictogram shall not be less than 1 cm².

1.2.1.4. The dimensions of the label and of each pictogram shall be as follows:

Table 1.3
Minimum dimensions of labels and pictograms

Capacity of the package	Dimensions of the label (in millimetres) for the information required by Article 17	Dimensions of each pictogram (in millimetres)
Not exceeding 3 litres:	If possible, at least 52 x 74	Not smaller than 10 x 10 If possible, at least 16 x 16

Greater than 3 litres but, not exceeding 50 litres:	At least 74 x 105	At least 23 x 23
Greater than 50 litres but not exceeding 500 litres:	At least 105 x 148	At least 32 x 32
Greater than 500 litres:	At least 148 x 210	At least 46 x 46

1.3. DEROGATIONS FROM LABELLING REQUIREMENTS FOR SPECIAL CASES

In accordance with Article 23 the following derogations shall apply:

1.3.1. Transportable gas cylinders

For transportable gas cylinders, one of the following shall be permitted to be used for gas cylinders with a water capacity of less than or equal to 150 litres:

- (a) A format and dimensions following the prescriptions of the current edition of Standard ISO 7225 relating to "Gas cylinders – Precautionary labels". In this case, the label can bear the generic name or industrial or commercial name of the substance or mixture provided that the hazardous substances in a mixture are shown on the body of the gas cylinder in a clear and indelible way.
- (b) The information specified in Article 17 provided on a durable information disc or label held captive on the cylinder.

1.3.2. Gas containers intended for propane, butane or liquefied petroleum gas (LPG)

- 1.3.2.1. If propane, butane and liquefied petroleum gas or a mixture containing these substances classified in accordance with the criteria of this Annex, is placed on the market in closed refillable cylinders or in non-refillable cartridges within the scope of EN 417 as fuel gases which are only released for combustion (current edition of EN 417, relating to "Non-refillable metallic gas cartridges for liquefied petroleum gases, with or without a valve, for use with portable appliances; construction, inspection, testing and marking"), these cylinders or cartridges shall only be labelled with the appropriate pictogram and the hazard and precautionary statements concerning flammability.

1.3.2.2. No information concerning the effects on human health and the environment is required on the label. Instead the supplier shall provide the information concerning effects on human health and the environment to downstream users or distributors by means of the safety data sheet (SDS).

1.3.2.3. For consumers, sufficient information shall be transmitted to enable them to take all necessary measures for health and safety.

1.3.3. Aerosols and containers fitted with a sealed spray attachment and containing substances or mixtures classified as presenting an aspiration hazard

With regard to the application of section 3.10.4, substances or mixtures classified in accordance with the criteria of sections 3.10.2 and 3.10.3 need not be labelled for this hazard when placed on the market in aerosol containers or in containers fitted with a sealed spray attachment.

1.3.4. Metals in massive form, alloys, mixtures containing polymers, mixtures containing elastomers

1.3.4.1. Metals in massive form, alloys, mixtures containing polymers and mixtures containing elastomers do not require a label according to this Annex, if they do not present a hazard to human health by inhalation, ingestion or contact with skin or to the aquatic environment in the form in which they are placed on the market, although classified as hazardous in accordance with the criteria of this Annex.

1.3.4.2. Instead, the supplier shall provide the information to downstream users or distributors by means of the SDS.

1.3.5. Explosives placed on the market with a view to obtaining an explosive or pyrotechnic effect

Explosives, as referred to in section 2.1, placed on the market with a view to obtaining an explosive or pyrotechnic effect shall be labelled and packaged in accordance with the requirements for explosives only.

1.4. REQUEST FOR USE OF AN ALTERNATIVE CHEMICAL NAME

1.4.1. Requests for use of an alternative chemical name under Article 24 may be granted only where

- (I) the substance has not been assigned a Community workplace exposure limit; and
- (II) the manufacturer, importer or downstream user can demonstrate that the use of the alternative chemical name meets the need to provide enough information for necessary health and safety precautions to be taken in the workplace and the need to ensure that risks from handling the mixture can be controlled; and
- (III) the substance is classified exclusively as one or more of the following hazard categories:
 - (a) any of the hazard categories referred to in Part 2 of this Annex;
 - (b) Acute toxicity, Category 4;
 - (c) Skin corrosion/irritation, Category 2;
 - (d) Serious eye damage/eye irritation, Category 2;
 - (e) Specific target organ toxicity – Single exposure, Category 2 or 3;
 - (f) Specific target organ toxicity – Repeated exposure, Category 2;
 - (g) Hazardous to the aquatic environment – Chronic, Category 3 or 4.

1.4.2. The choice of the chemical name(s) for mixtures intended for the fragrance or perfume industry

In the case of substances occurring in nature, a chemical name or chemical names of the type "essential oil of ..." or "extract of ..." may be used instead of the chemical names of the components of that essential oil or extract as referred to in Article 18(3)(b).

1.5. EXEMPTIONS FROM LABELLING AND PACKAGING REQUIREMENTS

1.5.1. Exemptions from Article 31 [(Article 29(1))]

1.5.1.1. Where Article 29(1) applies, the label elements mentioned in Article 17 may be provided in one of the following ways:

- (a) in fold-out labels; or
- (b) on tie-on tags; or
- (c) on an outer packaging.

1.5.1.2. The label on any inner packaging shall contain at least hazard pictograms, the product identifier referred to in Article 18 and name and telephone number of the supplier of the substance or mixture.

1.5.2. Exemptions from Article 17 [(Article 29(2))]

1.5.2.1. *Labelling of packages where the contents do not exceed 125 ml*

1.5.2.1.1. The hazard statements and the precautionary statements linked to the hazard categories listed below may be omitted from the label elements required by Article 17 where:

- (a) the contents of the package do not exceed 125 ml; and
- (b) the substance or mixture is classified in one or more of the following hazard categories:
 - 1) Oxidising gases of category 1;
 - 2) Gases under pressure;
 - 3) Flammable liquids of category 2 or 3;
 - 4) Flammable solids of category 1 or 2;
 - 5) Self-reactive substances or mixtures Types C to F;
 - 6) Self-heating substances or mixtures of category 2;

- 7) Substances and mixtures which, in contact with water, emit flammable gases of categories 1, 2 or 3;
- 8) Oxidising liquids of category 2 or 3;
- 9) Oxidising solids of category 2 or 3;
- 10) Organic peroxides Types C to F;
- 11) Acute toxicity of category 4, if the substances or mixtures are not supplied to the general public;
- 12) Skin irritation of category 2;
- 13) Eye irritation of category 2;
- 14) Specific target organ toxicity – single exposure of category 2 or 3, if the substance or mixture is not supplied to the general public;
- 15) Specific target organ toxicity – repeated exposure of category 2, if the substance or mixture is not supplied to the general public;
- 16) Hazardous to the aquatic environment – Acute of category 1;
- 17) Hazardous to the aquatic environment – Chronic of category 1 or 2.

The exemptions for labelling of small packages of aerosols as flammable laid down in Directive 75/324/EEC shall apply to aerosol dispensers.

1.5.2.1.2. The precautionary statements linked to the hazard categories listed below may be omitted from the label elements required by Article 17 where:

- (a) the contents of the package do not exceed 125 ml; and
- (b) the substance or mixture is classified in one or more of the following hazard categories:
 - 1) Flammable gases of category 2;
 - 2) Reproductive toxicity: effects on or via lactation;

- 3) Hazardous to the aquatic environment – Chronic of category 3 or 4.

1.5.2.1.3. The pictogram, the signal word, the hazard statement and the precautionary statement linked to the hazard categories listed below may be omitted from the label elements required by Article 17 where:

- (a) the contents of the package do not exceed 125 ml; and
- (b) the substance or mixture is classified in one or more of the following hazard categories:

- 1) Corrosive to metals.

1.5.2.2. *Labelling of soluble packaging for single use*

The label elements required by Article 17 may be omitted from soluble packaging intended for single use where:

- (a) The content of each soluble packaging does not exceed a volume of 25 ml;
- (b) The classification of the contents of the soluble packaging is exclusively one or more of the hazard categories in 1.5.2.1.1 (b), 1.5.2.1.2 (b) or 1.5.2.1.3 (b); and
- (c) The soluble packaging is contained within outer packaging that fully meets the requirements of Article 17.

1.5.2.3. Section 1.5.2.2 shall not apply to substances or mixtures within the scope of Directives 91/414/EEC or 98/8/EC.

2. PART 2: PHYSICAL HAZARDS

2.1. EXPLOSIVES

2.1.1. Definitions

2.1.1.1. The class of explosives comprises

- (a) explosive substances and mixtures;

- (b) explosive articles, except devices containing explosive substances or mixtures in such quantity or of such a character that their inadvertent or accidental ignition or initiation shall not cause any effect external to the device either by projection, fire, smoke, heat or loud noise; and
- (c) substances, mixtures and articles not mentioned in points (a) and (b) which are manufactured with a view to producing a practical, explosive or pyrotechnic effect.

2.1.1.2. For the purposes of this Regulation the following definitions shall apply:

An explosive substance or mixture is a solid or liquid substance or mixture of substances which is in itself capable by chemical reaction of producing gas at such a temperature and pressure and at such a speed as to cause damage to the surroundings. Pyrotechnic substances are included even when they do not evolve gases.

A pyrotechnic substance or mixture is a substance or mixture of substances designed to produce an effect by heat, light, sound, gas or smoke or a combination of these as the result of non-detonative self-sustaining exothermic chemical reactions.

An unstable explosive is an explosive substance or mixture which is thermally unstable and/or too sensitive for normal handling, transport and use.

An explosive article is an article containing one or more explosive substances or mixtures.

A pyrotechnic article is an article containing one or more pyrotechnic substances or mixtures.

An intentional explosive is a substance, mixture or article which is manufactured with a view to producing a practical, explosive or pyrotechnic effect.

2.1.2. Classification criteria

2.1.2.1. Substances, mixtures and articles of this class are classified as an unstable explosive on the basis of the flowchart in Figure 2.1.2. The test methods are described in Part I of the UN RTDG, Manual of Tests and Criteria.

2.1.2.2. Substances, mixtures and articles of this class, which are not classified as an unstable explosive, shall be assigned to one of the following six divisions depending on the type of hazard they present:

- (a) Division 1.1 Substances, mixtures and articles which have a mass explosion hazard (a mass explosion is one which affects almost the entire quantity present virtually instantaneously);
- (b) Division 1.2 Substances, mixtures and articles which have a projection hazard but not a mass explosion hazard;
- (c) Division 1.3 Substances, mixtures and articles which have a fire hazard and either a minor blast hazard or a minor projection hazard or both, but not a mass explosion hazard:
 - (i) combustion of which gives rise to considerable radiant heat; or
 - (ii) which burn one after another, producing minor blast or projection effects or both;
- (d) Division 1.4 Substances, mixtures and articles which present no significant hazard:
 - substances, mixtures and articles which present only a small hazard in the event of ignition or initiation. The effects are largely confined to the package and no projection of fragments of appreciable size or range is to be expected. An external fire shall not cause virtually instantaneous explosion of almost the entire contents of the package;
- (e) Division 1.5 Very insensitive substances or mixtures which have a mass explosion hazard:
 - substances and mixtures which have a mass explosion hazard but are so insensitive that there is very little probability of initiation or of transition from burning to detonation under normal conditions;
- (f) Division 1.6 Extremely insensitive articles which do not have a mass explosion hazard:
 - articles which contain only extremely insensitive detonating substances or mixtures and which demonstrate a negligible probability of accidental initiation or propagation.

2.1.2.3. Explosives, which are not classified as an unstable explosive, shall be classified in one of the six divisions referred to in paragraph 2.1.2.2 of this Annex based on Test Series 2 to 8 in Part I of the UN RTDG, Manual of Tests and Criteria according to the results of the tests laid down in Table 2.1.1:

Table 2.1.1
Criteria for explosives

Category	Criteria
Unstable explosives or explosives of Divisions 1.1 to 1.6	<p>For explosives of Divisions 1.1 to 1.6, the following are the core set of tests that need to be performed:</p> <p>Explosibility: according to UN Test Series 2 (section 12 of the UN RTDG, Manual of Tests and Criteria). Intentional explosives¹ shall not be subject to UN Test Series 2.</p> <p>Sensitiveness: according to UN Test Series 3 (section 13 of the UN RTDG, Manual of Tests and Criteria).</p> <p>Thermal stability: according to UN Test 3(c) (sub-section 13.6.1 of the UN RTDG, Manual of Tests and Criteria).</p> <p>Further tests are necessary to allocate the correct Division.</p>

2.1.2.4. If explosives are unpackaged or repacked in packaging other than the original or similar packaging, they shall be retested.

2.1.3. Hazard Communication

Label elements shall be used for substances, mixtures or articles meeting the criteria for classification in this hazard class in accordance with Table 2.1.2.

NOTE to Table 2.1.2: Unpackaged explosives or explosives repacked in packaging other than the original or similar packaging shall include all of the following label elements:






- (a) the pictogram: exploding bomb;
- (b) the signal word: "Danger"; and

¹ This comprises substances, mixtures and articles which are manufactured with a view to producing a practical, explosive or pyrotechnic effect.

(c) the hazard statement: "explosive; mass explosion hazard"

unless the hazard is shown to correspond to one of the hazard categories in Table 2.1.2, in which case the corresponding symbol, the signal word and/or the hazard statement shall be assigned.

Table 2.1.2: Label elements for explosives

Classification	Unstable Explosive	Division 1.1	Division 1.2	Division 1.3	Division 1.4	Division 1.5	Division 1.6
GHS Pictograms							
Signal Word	Danger	Danger	Danger	Danger	Warning	Danger	No signal word
Hazard Statement	H200: Unstable Explosive	H201: Explosive; mass explosion hazard	H202: Explosive; severe projection hazard	H203: Explosive; fire, blast or projection hazard	H204: Fire or projection hazard	H205: May mass explode in fire	No hazard statement
Precautionary Statement Prevention	P201 P202 P281	P210 P230 P240 P250 P280	P210 P230 P240 P250 P280	P210 P230 P240 P250 P280	P210 P240 P250 P280	P210 P230 P240 P250 P280	No precautionary statement
Precautionary Statement Response	P372 P373 P380	P370+P380 P372 P373	P370+P380 P372 P373	P370+P380 P372 P373	P370+P380 P372 P373	P370+P380 P372 P373	No precautionary statement
Precautionary Statement Storage	P401	P401	P401	P401	P401	P401	No precautionary statement
Precautionary Statement Disposal	P501	P501	P501	P501	P501	P501	No precautionary statement

2.1.4. Additional Classification Considerations

2.1.4.1. The classification of substances, mixtures and articles in the explosives hazard class and further allocation to a division is a very complex, three step procedure. Reference to Part I of the UN RTDG, Manual of Tests and Criteria is necessary.

The first step is to ascertain whether the substance or mixture has explosive effects (Test Series 1). The second step is the acceptance procedure (Test Series 2 to 4) and the third step is the assignment to a hazard division (Test Series 5 to 7). The assessment whether a candidate for "ammonium nitrate emulsion or suspension or gel, intermediate for blasting explosives (ANE)" is insensitive enough for inclusion as an oxidising liquid (section 2.13) or an oxidising solid (section 2.14) is answered by Test Series 8 tests.

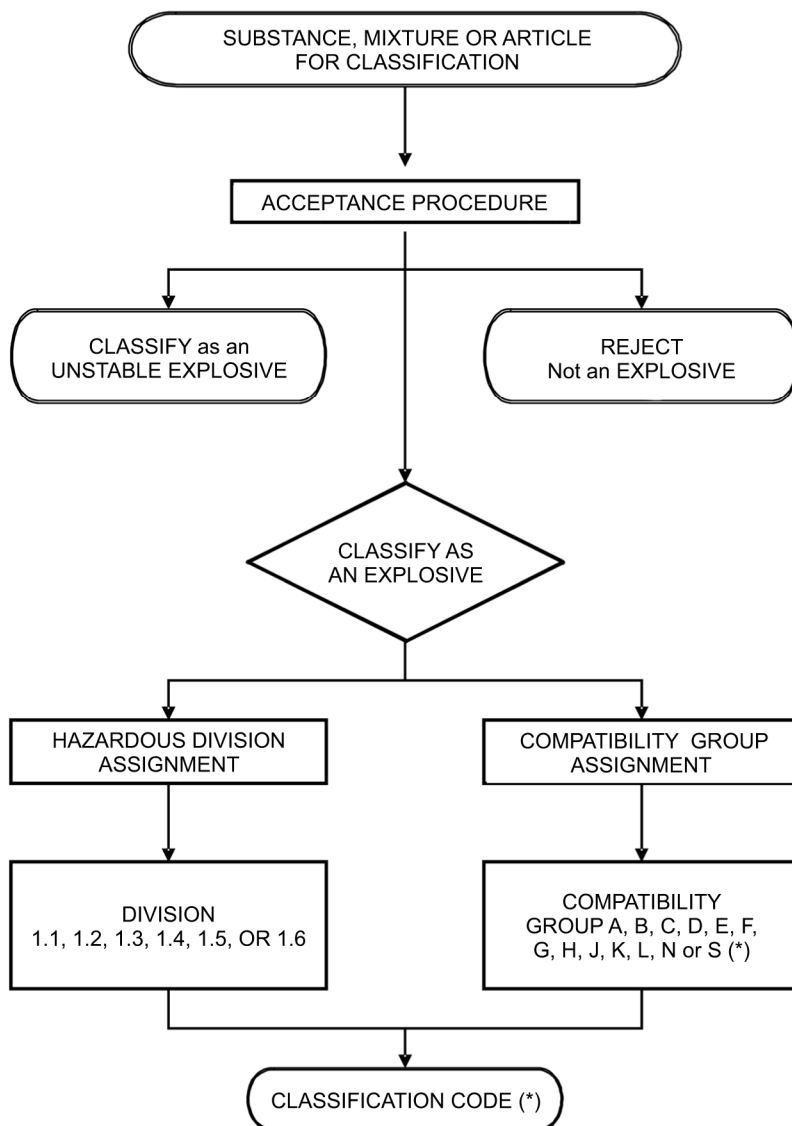
Explosive substances and mixtures wetted with water or alcohols, or diluted with other substances to suppress their explosive properties, may be treated differently in terms of classification and other hazard classes may apply, according to their physical properties (see also Annex II section 1.1.).

Certain physical hazards (due to explosive properties) are altered by dilution, as is the case for desensitised explosives, by inclusion in a mixture or article, packaging or other factors.

The classification procedure is set out in the following decision logic (see Figures 2.1.1 to 2.1.4).

Figure 2.1.1

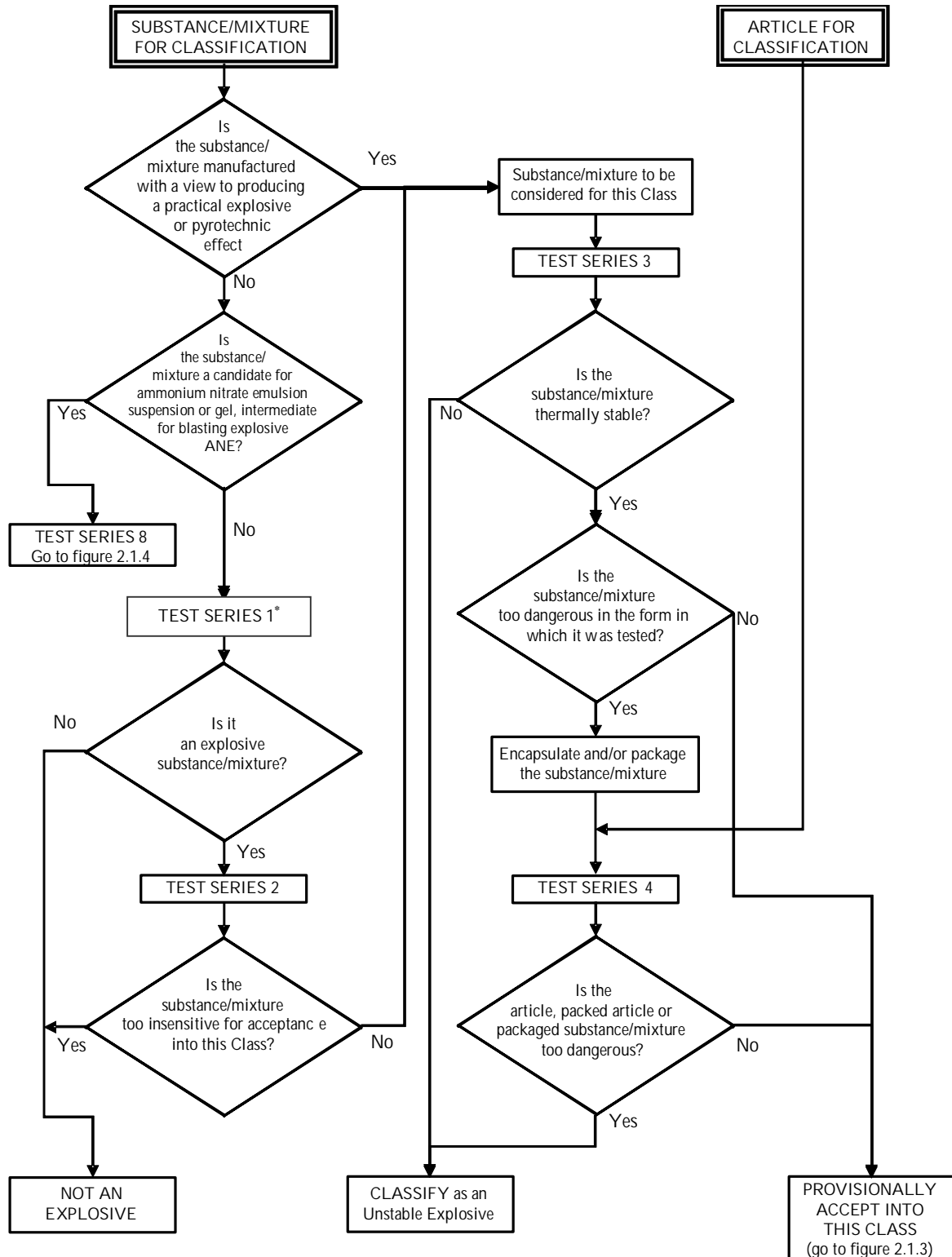
Overall scheme of the procedure for classifying a substance, mixture or article in the class of explosives (Class 1 for transport)



(*) see UN Recommendations on the Transport of Dangerous Goods, Model Regulations, 16th rev. ed, sub-section 2.1.2.

Figure 2.1.2

Procedure for provisional acceptance of a substance, mixture or article in the class of explosives (Class 1 for transport)



* For classification purposes, start with Test Series 2.

Figure 2.1.3

Procedure for assignment to a division in the class of explosives (Class 1 for transport)

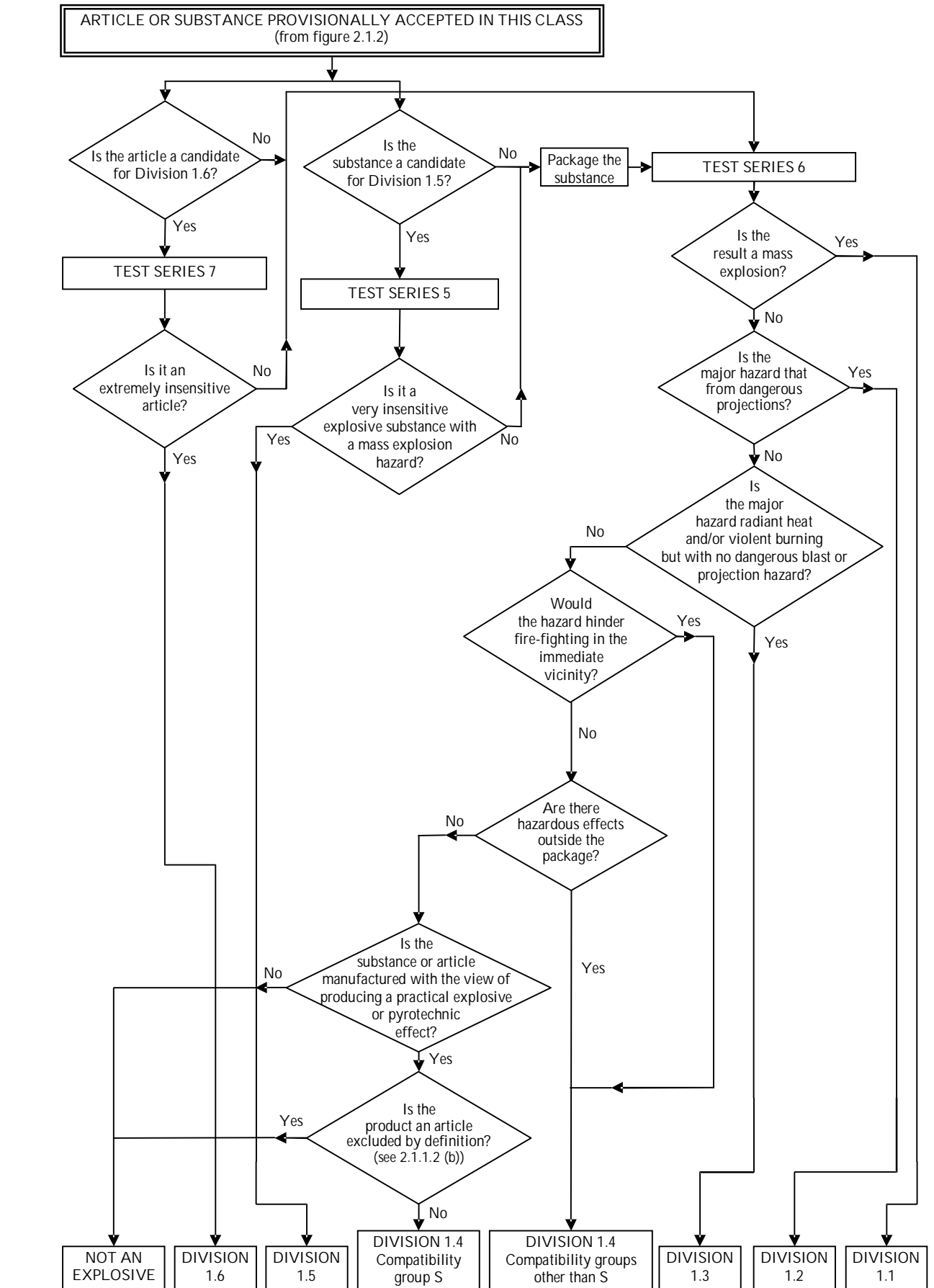
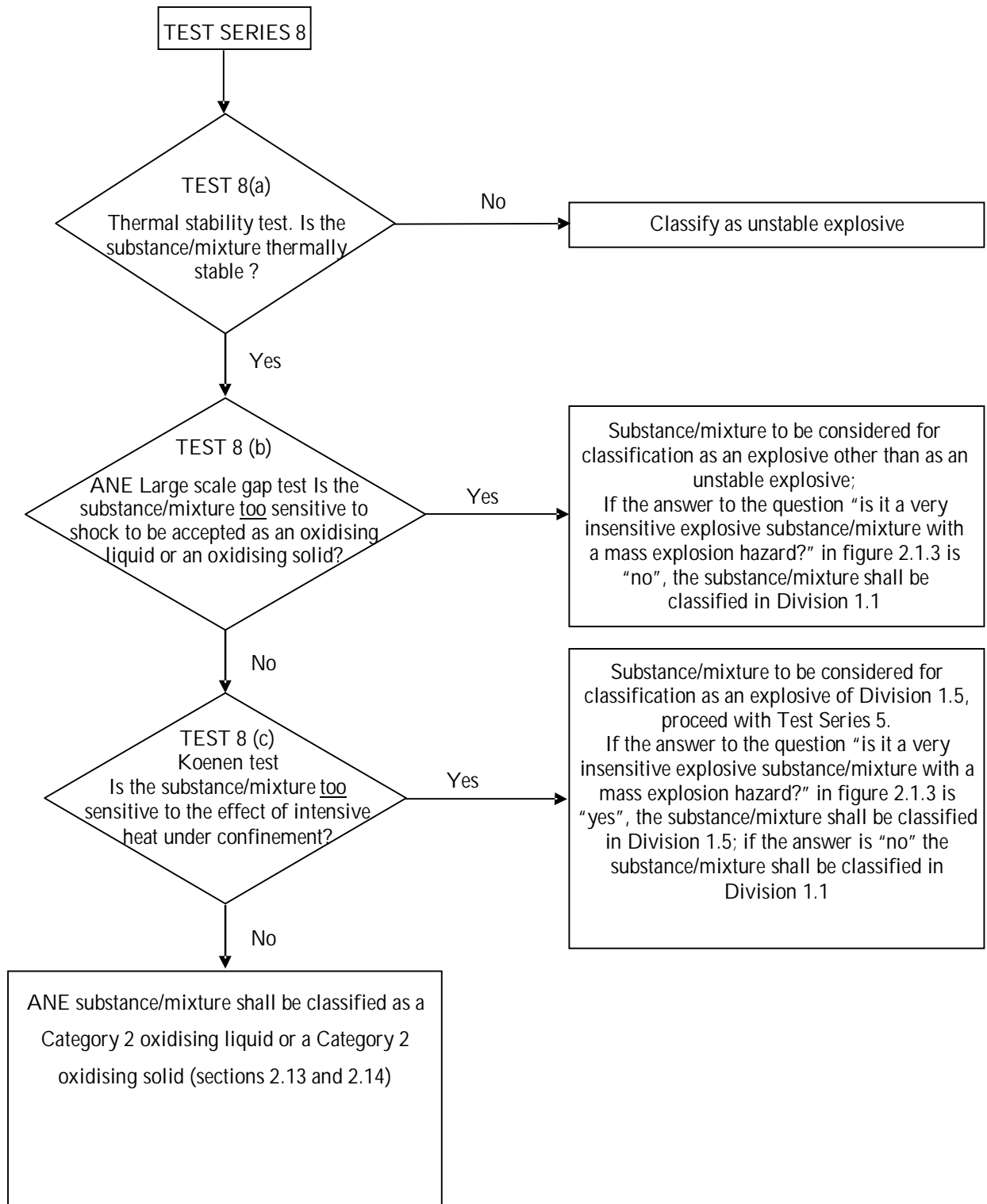


Figure 2.1.4

Procedure for the classification of ammonium nitrate emulsion, suspension or gel (ANE)



2.1.4.2. *Screening procedure*

Explosive properties are associated with the presence of certain chemical groups in a molecule which can react to produce very rapid increases in temperature or pressure. The screening procedure is aimed at identifying the presence of such reactive groups and the potential for rapid energy release. If the screening procedure identifies the substance or mixture to be a potential explosive, the acceptance procedure (see section 10.3 of the UN RTDG, Manual of Tests and Criteria) has to be performed.

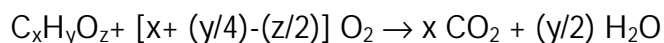
Note:

Neither a Series 1 type (a) propagation of detonation test nor a Series 2 type (a) test of sensitivity to detonative shock is required if the exothermic decomposition energy of organic materials is less than 800 J/g. For organic substances and mixtures of organic substances with a decomposition energy of 800 J/g or more, tests 1 (a) and 2 (a) need not be performed if the outcome of the ballistic mortar Mk.III d test (F.1), or the ballistic mortar test (F.2) or the BAM Trauzl test (F.3) with initiation by a standard No 8 detonator (see Appendix 1 to the UN RTDG, Manual of Tests and Criteria) is "no". In this case, the results of test 1 (a) and 2 (a) are deemed to be "-".

2.1.4.3. A substance or mixture shall not be classified as explosive if:

- (a) There are no chemical groups associated with explosive properties present in the molecule. Examples of groups which may indicate explosive properties are given in Table A6.1 in Appendix 6 of the UN RTDG, Manual of Tests and Criteria; or
- (b) The substance contains chemical groups associated with explosive properties which include oxygen and the calculated oxygen balance is less than -200;

The oxygen balance is calculated for the chemical reaction:



Using the formula:

$$\text{Oxygen balance} = -1600 [2x + (y/2) - z] / \text{molecular weight};$$

- (c) When the organic substance or a homogenous mixture of organic substances contains chemical groups associated with explosive properties but the exothermic

decomposition energy is less than 500 J/g and the onset of exothermic decomposition is below 500°C. The exothermic decomposition energy can be determined using a suitable calorimetric technique; or

- (d) For mixtures of inorganic oxidising substances with organic material(s), the concentration of the inorganic oxidising substance is:
- less than 15 % by mass, if the oxidising substance is assigned to Categories 1 or 2;
 - less than 30 % by mass, if the oxidising substance is assigned to Category 3.

2.1.4.4. In the case of mixtures containing any known explosives, the acceptance procedure has to be performed.

2.2. FLAMMABLE GASES

2.2.1. Definition

Flammable gas means a gas or gas mixture having a flammable range with air at 20°C and a standard pressure of 101,3 kPa.

2.2.2. Classification criteria

2.2.2.1. A flammable gas shall be classified in this class in accordance with Table 2.2.1:

Table 2.2.1
Criteria for flammable gases

Category	Criteria
1	Gases, which at 20°C and a standard pressure of 101,3 kPa: (a) are ignitable when in a mixture of 13 % or less by volume in air; or (b) have a flammable range with air of at least 12 percentage points regardless of the lower flammable limit.
2	Gases, other than those of Category 1, which, at 20°C and a standard pressure of 101,3 kPa, have a flammable range while mixed in air.


Note:

Aerosols shall not be classified as flammable gases; see section 2.3.

2.2.3. Hazard Communication

Label elements shall be used for substances and mixtures meeting the criteria for classification in this hazard class in accordance with Table 2.2.2.

Table 2.2.2
Label elements for flammable gases

Classification	Category 1	Category 2
GHS Pictogram		No pictogram
Signal Word	Danger	Warning
Hazard Statement	H220: Extremely flammable gas	H221: Flammable gas
Precautionary Statement Prevention	P210	P210
Precautionary Statement Response	P377 P381	P377 P381
Precautionary Statement Storage	P403	P403
Precautionary Statement Disposal		

2.2.4. Additional Classification Considerations

2.2.4.1. Flammability shall be determined by tests or, for mixtures where there are sufficient data available, by calculation in accordance with the methods adopted by ISO (see ISO 10156 as amended, Gases and gas mixtures – Determination of fire potential and oxidising ability for the selection of cylinder valve outlet). Where insufficient data are available to use these methods, test method EN 1839 as amended (Determination of explosion limits of gases and vapours) can be used.

2.3. FLAMMABLE AEROSOLS

2.3.1. Definitions

Aerosols, this means aerosol dispensers, are any non-refillable receptacles made of metal, glass or plastics and containing a gas compressed, liquefied or dissolved under pressure, with or without a liquid, paste or powder, and fitted with a release device allowing the contents to be ejected as solid or liquid particles in suspension in a gas, as a foam, paste or powder or in a liquid state or in a gaseous state.

2.3.2. Classification criteria

2.3.2.1. Aerosols shall be considered for classification as flammable in accordance with 2.3.2.2 if they contain any component which is classified as flammable according to the criteria contained in this Part, i.e.:

- Liquids with a flash point \bullet 93°C, which includes Flammable Liquids according to section 2.6;
- Flammable gases (see 2.2);
- Flammable solids (see 2.7).

Note 1:

Flammable components do not cover pyrophoric, self-heating or water-reactive substances and mixtures because such components are never used as aerosol contents.

Note 2:

Flammable aerosols do not fall additionally within the scope of sections 2.2 (flammable gases), 2.6 (flammable liquids) or 2.7 (flammable solids).

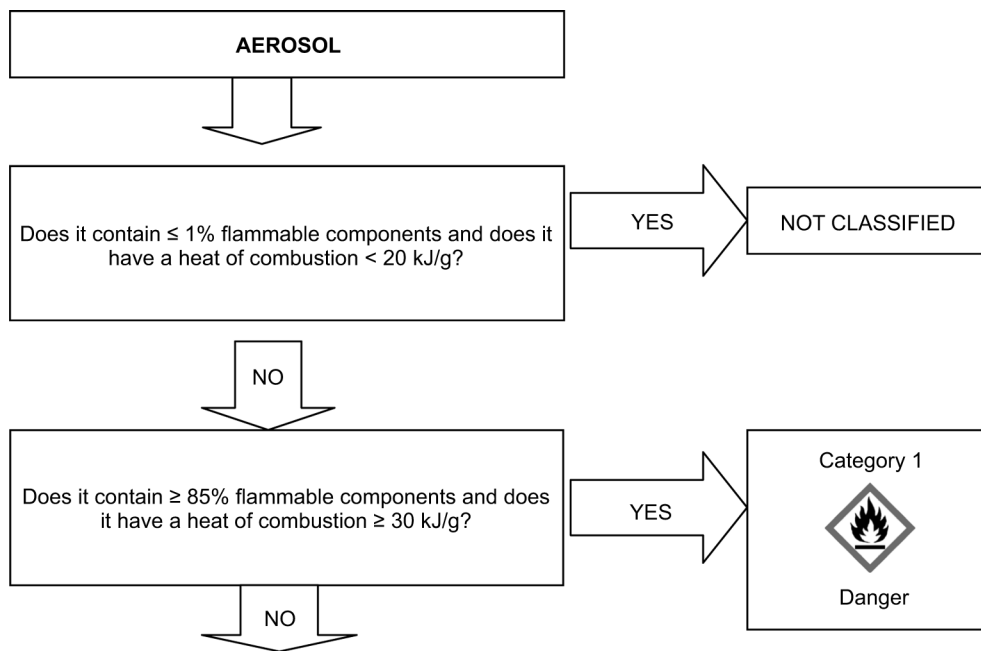
2.3.2.2. A flammable aerosol shall be classified in one of the two categories for this Class on the basis of its components, of its chemical heat of combustion and, if applicable, of the results of the foam test (for foam aerosols) and of the ignition distance test and enclosed space test (for spray aerosols) in accordance with Figure 2.3.1 and the UN RTDG, Manual of Tests and Criteria, Part III, sub-sections 31.4, 31.5 and 31.6.

Note:

Aerosols not submitted to the flammability classification procedures in this section shall be classified as flammable aerosols, Category 1.

Figure 2.3.1
for flammable aerosols

Figure 2.3.1(a) for flammable aerosols



For spray aerosols, go to decision logic 2.3.1 (b);

For foam aerosols, got to decision logic 2.3.1 (c).

Figure 2.3.1(b) for spray aerosols

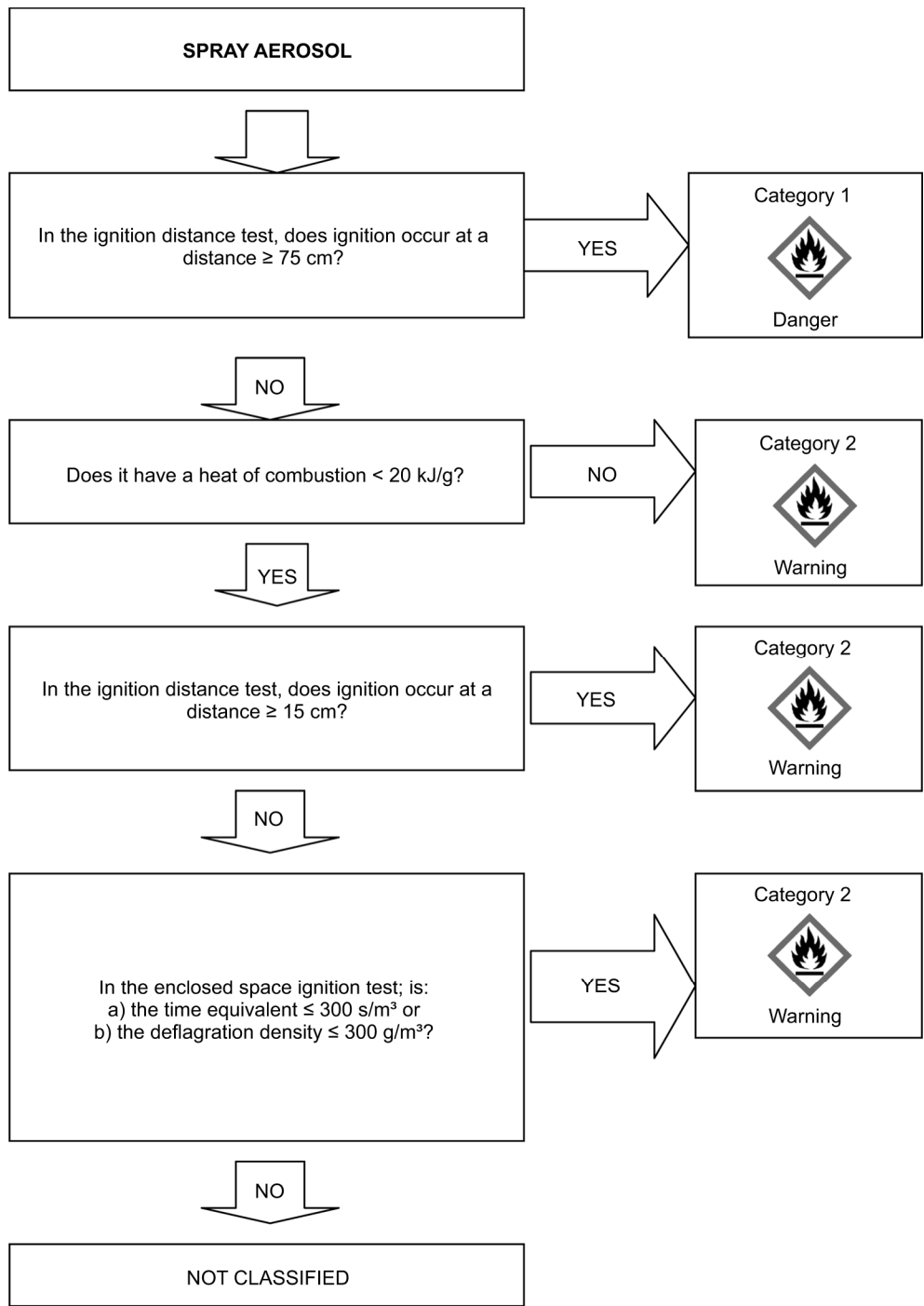
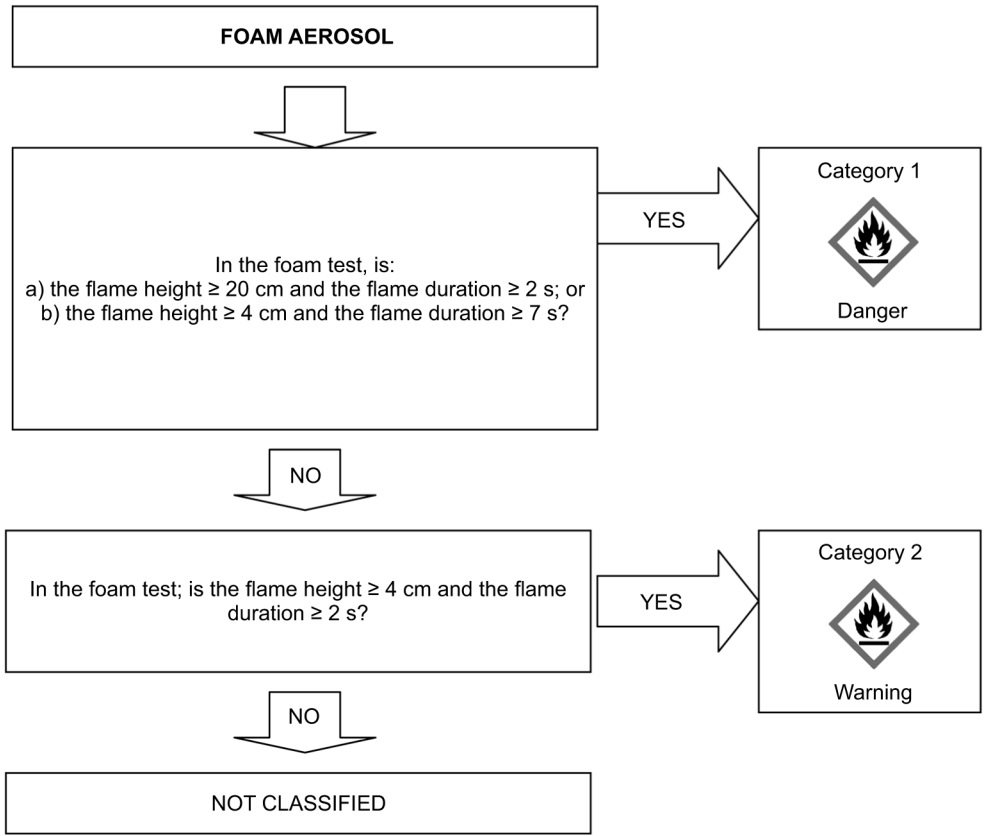




Figure 2.3.1(c) for foam aerosols



2.3.3. Hazard Communication

Label elements shall be used for substances or mixtures meeting the criteria for classification in this hazard class in accordance with Table 2.3.2.

Table 2.3.2
Label elements for flammable aerosols

Classification	Category 1	Category 2
GHS Pictograms		
Signal Word	Danger	Warning
Hazard Statement	H222: Extremely flammable aerosol	H223: Flammable aerosol
Precautionary Statement Prevention	P210 P211 P251	P210 P211 P251
Precautionary Statement Response		
Precautionary Statement Storage	P410 + P412	P410 + P412
Precautionary Statement Disposal		

2.3.4. Additional Classification Considerations

2.3.4.1. The chemical heat of combustion (ΔH_c), in kilojoules per gram (kJ/g), is the product of the theoretical heat of combustion (ΔH_{comb}), and a combustion efficiency, usually less than 1,0 (a typical combustion efficiency is 0,95 or 95 %).

For a composite aerosol formulation, the chemical heat of combustion is the summation of the weighted heats of combustion for the individual components, as follows:

$$\Delta H_{c \text{ (product)}} = \sum_i^n [w_i \% \times \Delta H_{c(i)}]$$

where:

ΔH_c = chemical heat of combustion (kJ/g);

w_i % = mass fraction of component i in the product;

$\Delta H_{c(i)}$ = specific heat of combustion (kJ/g) of component i in the product.

The chemical heats of combustion can be found in the literature, calculated or determined by tests (see ASTM D 240 as amended – Standard Test Methods for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter, EN/ISO 13943 as amended, 86.1 to 86.3 – Fire safety – Vocabulary, and NFPA 30B as amended – Code for the Manufacture and Storage of Aerosol Products).

2.4. OXIDISING GASES

2.4.1. Definitions

Oxidising gas means any gas or gas mixture which may, generally by providing oxygen, cause or contribute to the combustion of other material more than air does.

2.4.2. Classification criteria

2.4.2.1. An oxidising gas shall be classified in a single category for this class in accordance with Table 2.4.1.:

Table 2.4.1
Criteria for oxidising gases

Category	Criteria
1	Any gas which may, generally by providing oxygen, cause or contribute to the combustion of other material more than air does.


NOTE:

"Gases which cause or contribute to the combustion of other material more than air does" mean pure gases or gas mixtures with an oxidising power greater than 23,5 % as determined by a method specified in ISO 10156 as amended or 10156-2 as amended.

2.4.3. Hazard Communication

Label elements shall be used for substances or mixtures meeting the criteria for classification in this hazard class in accordance with Table 2.4.2.

Table 2.4.2
Label elements for oxidising gases

Classification	Category 1
GHS Pictogram	
Signal Word	Danger
Hazard Statement	H270: May cause or intensify fire; oxidiser
Precautionary Statement Prevention	P220 P244
Precautionary Statement Response	P370 + P376
Precautionary Statement Storage	P403
Precautionary Statement Disposal	

2.4.4. Additional Classification Considerations

To classify an oxidising gas, tests or calculation methods as described in ISO 10156 as amended, gases and gas mixtures – Determination of fire potential and oxidising ability for the selection of cylinder valve outlet and ISO 10156-2 as amended, gas cylinders – gases and gas mixtures – Determination of oxidising ability of toxic and corrosive gases and gas mixtures – shall be performed.

2.5. GASES UNDER PRESSURE

2.5.1. Definition

2.5.1.1. Gases under pressure are gases which are contained in a receptacle at a pressure of 200 kPa (gauge) or more, or which are liquefied or liquefied and refrigerated.

They comprise compressed gases, liquefied gases, dissolved gases and refrigerated liquefied gases.

2.5.1.2. The critical temperature is the temperature above which a pure gas cannot be liquefied, regardless of the degree of compression.

2.5.2. Classification criteria

Gases shall be classified, according to their physical state when packaged, in one of four groups in accordance with Table 2.5.1:





Table 2.5.1
Criteria for gases under pressure

Group	Criteria
Compressed gas	A gas which when packaged under pressure is entirely gaseous at -50°C; including all gases with a critical temperature \leq -50°C.
Liquefied gas	A gas which, when packaged under pressure, is partially liquid at temperatures above -50°C. A distinction is made between: (i) high pressure liquefied gas: a gas with a critical temperature between -50°C and +65°C; and (ii) low pressure liquefied gas: a gas with a critical temperature above +65°C.
Refrigerated liquefied gas	A gas which when packaged is made partially liquid because of its low temperature.
Dissolved gas	A gas which when packaged under pressure is dissolved in a liquid phase solvent.

2.5.3. Hazard Communication

Label elements shall be used for substances or mixtures meeting the criteria for classification in this hazard class in accordance with Table 2.5.2.

Table 2.5.2
Label elements for gases under pressure

Classification	Compressed gas	Liquefied gas	Refrigerated liquefied gas	Dissolved gas
GHS Pictograms				
Signal Word	Warning	Warning	Warning	Warning
Hazard Statement	H280: Contains gas under pressure; may explode if heated	H280: Contains gas under pressure; may explode if heated	H281: Contains refrigerated gas; may cause cryogenic burns or injury	H280: Contains gas under pressure; may explode if heated
Precautionary Statement Prevention			P282	
Precautionary Statement Response			P336 P315	
Precautionary Statement Storage	P410 + P403	P410 + P403	P403	P410 + P403
Precautionary Statement Disposal				

Note:

Pictogram GHS04 is not required for gases under pressure where pictogram GHS02 or pictogram GHS06 appears.

2.5.4. Additional Classification Considerations

For this group of gases, the following information is required to be known:

- the vapour pressure at 50°C;
- the physical state at 20°C at standard ambient pressure;

- the critical temperature.

Data can be found in the literature, calculated or determined by testing. Most pure gases are already classified in the UN RTDG, Model Regulations.

2.6. FLAMMABLE LIQUIDS

2.6.1. Definition

Flammable liquid means a liquid having a flash point of not more than 60°C.

2.6.2. Classification criteria

2.6.2.1. A flammable liquid shall be classified in one of the three categories for this class in accordance with Table 2.6.1:

Table 2.6.1
Criteria for flammable liquids

Category	Criteria
1	Flash point < 23°C and initial boiling point • 35°C
2	Flash point < 23°C and initial boiling point > 35°C
3	Flash point • 23°C and • 60°C ¹

Note:




Aerosols shall not be classified as flammable liquids, see section 2.3.

¹ For the purpose of this Regulation gas oils, diesel and light heating oils having a flash point between • 55°C and • 75°C may be regarded as Category 3.

2.6.3. Hazard Communication

Label elements shall be used for substances or mixtures meeting the criteria for classification in this hazard class in accordance with Table 2.6.2.

Table 2.6.2
Label elements for flammable liquids

Classification	Category 1	Category 2	Category 3
GHS Pictograms			
Signal Word	Danger	Danger	Warning
Hazard Statement	H224: Extremely flammable liquid and vapour	H225: Highly flammable liquid and vapour	H226: Flammable liquid and vapour
Precautionary Statement Prevention	P210 P233 P240 P241 P242 P243 P280	P210 P233 P240 P241 P242 P243 P280	P210 P233 P240 P241 P242 P243 P280
Precautionary Statement Response	P303 + P361 + P353 P370 + P378	P303 + P361 + P353 P370 + P378	P303 + P361 + P353 P370 + P378
Precautionary Statement Storage	P403 + P235	P403 + P235	P403 + P235
Precautionary Statement Disposal	P501	P501	P501

2.6.4. Additional Classification Considerations

2.6.4.1. For the classification of flammable liquids data on flash point and initial boiling point are needed. Data can be determined by testing, found in literature or calculated. If data are not available, the flash point and the initial boiling point shall be determined through testing. For flash point determination a closed-cup method shall be used.

2.6.4.2. In the case of mixtures¹ containing known flammable liquids in defined concentrations, although they may contain non-volatile components e.g. polymers, additives, the flash point need not be determined experimentally if the calculated flash point of the mixture, using the method given in 2.6.4.3, is at least 5°C² greater than the relevant classification criterion (23 °C and 60 °C, respectively) and provided that:

- (a) the composition of the mixture is accurately known (if the material has a specified range of composition, the composition with the lowest calculated flash point shall be selected for assessment);
- (b) the lower explosion limit of each component is known (an appropriate correlation has to be applied when these data are extrapolated to other temperatures than test conditions) as well as a method for calculating the lower explosion limit of the mixture;
- (c) the temperature dependence of the saturated vapour pressure and of the activity coefficient is known for each component as present in the mixture;
- (d) the liquid phase is homogeneous.

2.6.4.3. One suitable method is described in Gmehling and Rasmussen (Ind. Eng. Fundament, 21, 186, (1982)). For a mixture containing non-volatile components the flash point is calculated from the volatile components. It is considered that a non-volatile component only slightly decreases the partial pressure of the solvents and the calculated flash point is only slightly below the measured value.

2.6.4.4. Possible test methods for determining the flash point of flammable liquids are listed in Table 2.6.3.

¹ To date, the calculation method has been validated for mixtures containing up to 6 volatile components. These components may be flammable liquids like hydrocarbons, ethers, alcohols, esters (except acrylates), and water. It is however not yet validated for mixtures containing halogenated sulphurous, and/or phosphoric compounds as well as reactive acrylates.

² If the calculated flash point is less than 5°C greater than the relevant classification criterion, the calculation method may not be used and the flash point should be determined experimentally.

Table 2.6.3**Methods for determining the flash point of flammable liquids**

European standards:	EN ISO 1516 as amended Determination of flash/no flash – Closed cup equilibrium method
	EN ISO 1523 as amended Determination of flash point – Closed cup equilibrium method
	EN ISO 2719 as amended Determination of flash point – Pensky-Martens closed cup method
	EN ISO 3679 as amended Determination of flash point – Rapid equilibrium closed cup method
	EN ISO 3680 as amended Determination of flash/no flash – Rapid equilibrium closed cup method
	EN ISO 13736 as amended Petroleum products and other liquids – Determination of flash point – Abel closed cup method
National standards:	
Association française de normalisation, AFNOR:	NF M07-036 as amended Détermination du point d'éclair – Vase clos Abel-Pensky (identical to DIN 51755)
Deutsches Institut für Normung	DIN 51755 (flash points below 65 C) as amended Prüfung von Mineralölen und anderen brennbaren Flüssigkeiten; Bestimmung des Flammpunktes im geschlossenen Tiegel, nach Abel-Pensky (identical to NF M07-036)

2.6.4.5. Liquids with a flash point of more than 35°C and not more than 60 °C need not be classified in Category 3 if negative results have been obtained in the sustained combustibility test L.2, Part III, section 32 of the UN RTDG, Manual of Tests and Criteria.

2.6.4.6 Possible test methods for determining the initial boiling point of flammable liquids are listed in Table 2.6.4.

Table 2.6.4
Methods for determining the initial boiling point of flammable liquids

European standards:	EN ISO 3405 as amended Petroleum products -- Determination of distillation characteristics at atmospheric pressure
	EN ISO 3924 as amended Petroleum products -- Determination of boiling range distribution -- Gas chromatography method
	EN ISO 4626 as amended Volatile organic liquids -- Determination of boiling range of organic solvents used as raw materials
Regulation (EC) No 440/2008¹	Method A.2 as described in Part A of the Annex to Regulation (EC) No 440/2008

2.7. FLAMMABLE SOLIDS

2.7.1. Definition

2.7.1.1. A flammable solid means a solid which is readily combustible, or may cause or contribute to fire through friction.

Readily combustible solids are powdered, granular, or pasty substances or mixtures which are dangerous if they can be easily ignited by brief contact with an ignition source, such as a burning match, and if the flame spreads rapidly.

2.7.2. Classification criteria

2.7.2.1. Powdered, granular or pasty substances or mixtures (except powders of metals or metal alloys – see 2.7.2.2) shall be classified as readily combustible solids when the time of burning of one or more of the test runs, performed in accordance with the test method described in Part III, sub-section 33.2.1, of the UN RTDG, Manual of Tests and Criteria, is less than 45 seconds or the rate of burning is more than 2,2 mm/s.

¹ OJ L 142, 31.5.2008, p. 1.

2.7.2.2. Powders of metals or metal alloys shall be classified as flammable solids when they can be ignited and the reaction spreads over the whole length of the sample in 10 minutes or less.

2.7.2.3. A flammable solid shall be classified in one of the two categories for this class using Method N.1 as described in 33.2.1 of the UN RTDG, Manual of Tests and Criteria in accordance with Table 2.7.1:

Table 2.7.1
Criteria for flammable solids

Category	Criteria
1	Burning rate test Substances and mixtures other than metal powders: (a) wetted zone does not stop fire and (b) burning time < 45 seconds or burning rate > 2,2 mm/s Metal powders burning time ≤ 5 minutes
2	Burning rate test Substances and mixtures other than metal powders: (a) wetted zone stops the fire for at least 4 minutes and (b) burning time < 45 seconds or burning rate > 2,2 mm/s Metal powders burning time > 5 minutes and ≤ 10 minutes

Note 1:

The test shall be performed on the substance or mixture in its physical form as presented. If, for example, for the purposes of supply or transport, the same chemical is to be presented in a physical form different from that which was tested and which is considered likely to materially alter its performance in a classification test, the substance shall also be tested in the new form.



Note 2:

Aerosols shall not be classified as flammable solids, see section 2.3.

2.7.3. Hazard Communication

Label elements shall be used for substances or mixtures meeting the criteria for classification in this hazard class in accordance with Table 2.7.2.

Table 2.7.2
Label elements for flammable solids

Classification	Category 1	Category 2
GHS Pictograms		
Signal Word	Danger	Warning
Hazard Statement	H228: Flammable Solid	H228: Flammable Solid
Precautionary Statement Prevention	P210 P240 P241 P280	P210 P240 P241 P280
Precautionary Statement Response	P370 + P378	P370 + P378
Precautionary Statement Storage		
Precautionary Statement Disposal		

2.8. SELF-REACTIVE SUBSTANCES AND MIXTURES

2.8.1. Definition

2.8.1.1. Self-reactive substances or mixtures are thermally unstable liquid or solid substances or mixtures liable to undergo a strongly exothermic decomposition even without participation of oxygen (air). This definition excludes substances and mixtures classified according to this Part as explosives, organic peroxides or as oxidising.

2.8.1.2. A self-reactive substance or mixture is regarded as possessing explosive properties when in laboratory testing the formulation is liable to detonate, to deflagrate rapidly or to show a violent effect when heated under confinement.

2.8.2. Classification criteria

2.8.2.1. Any self-reactive substance or mixture shall be considered for classification in this class as a self-reactive substance or mixture unless:

- (a) they are explosives, according to the criteria given in 2.1;
- (b) they are oxidising liquids or solids, according to the criteria given in 2.13 or 2.14, except that mixtures of oxidising substances, which contain 5 % or more of combustible organic substances shall be classified as self-reactive substances according to the procedure defined in 2.8.2.2;
- (c) they are organic peroxides, according to the criteria given in 2.15;
- (d) their heat of decomposition is less than 300 J/g; or
- (e) their self-accelerating decomposition temperature (SADT) is greater than 75°C for a 50 kg package¹.

2.8.2.2. Mixtures of oxidising substances, meeting the criteria for classification as oxidising substances, which contain 5 % or more of combustible organic substances and which do not meet the criteria mentioned in (a), (c), (d) or (e) in 2.8.2.1, shall be subjected to the self-reactive substances classification procedure;

Such a mixture showing the properties of a self-reactive substance type B to F (see 2.8.2.3) shall be classified as a self-reactive substance.

Where the test is conducted in the package form and the packaging is changed, a further test shall be conducted where it is considered that the change in packaging will affect the outcome of the test.

2.8.2.3. Self-reactive substances and mixtures shall be classified in one of the seven categories of "types A to G" for this class, according to the following principles:

- (a) any self-reactive substance or mixture which can detonate or deflagrate rapidly, as packaged, shall be defined as self-reactive substance TYPE A;

¹ See UN RTDG, Manual of Tests and Criteria, sub-sections 28.1, 28.2, 28.3 and Table 28.3.

- (b) any self-reactive substance or mixture possessing explosive properties and which, as packaged, neither detonates nor deflagrates rapidly, but is liable to undergo a thermal explosion in that package shall be defined as self-reactive substance TYPE B;
- (c) any self-reactive substance or mixture possessing explosive properties when the substance or mixture as packaged cannot detonate or deflagrate rapidly or undergo a thermal explosion shall be defined as self-reactive substance TYPE C;
- (d) any self-reactive substance or mixture which in laboratory testing:
 - (i) detonates partially, does not deflagrate rapidly and shows no violent effect when heated under confinement; or
 - (ii) does not detonate at all, deflagrates slowly and shows no violent effect when heated under confinement; or
 - (iii) does not detonate or deflagrate at all and shows a medium effect when heated under confinement;shall be defined as self-reactive substance TYPE D;
- (e) any self-reactive substance or mixture which, in laboratory testing, neither detonates nor deflagrates at all and shows low or no effect when heated under confinement shall be defined as self-reactive substance TYPE E;
- (f) any self-reactive substance or mixture which, in laboratory testing, neither detonates in the cavitated state nor deflagrates at all and shows only a low or no effect when heated under confinement as well as low or no explosive power shall be defined as self-reactive substance TYPE F;
- (g) any self-reactive substance or mixture which, in laboratory testing, neither detonates in the cavitated state nor deflagrates at all and shows no effect when heated under confinement nor any explosive power, provided that it is thermally stable (SADT is 60°C to 75°C for a 50 kg package), and, for liquid mixtures, a diluent having a boiling point not less than 150°C is used for desensitisation shall be defined as self-reactive substance TYPE G. If the mixture is not thermally stable or a diluent having a boiling point less than 150°C is used for desensitisation, the mixture shall be defined as self-reactive substance TYPE F.

Where the test is conducted in the package form and the packaging is changed, a further test shall be conducted where it is considered that the change in packaging will affect the outcome of the test.





2.8.2.4. *Criteria for temperature control*

Self-reactive substances need to be subjected to temperature control if their SADT is less than or equal to 55°C. Test methods for determining the SADT as well as the derivation of control and emergency temperatures are given in, Part II, section 28 of the UN RTDG, Manual of Tests and Criteria. The test selected shall be conducted in a manner which is representative, both in size and material, of the package.

2.8.3. **Hazard Communication**

Label elements shall be used for substances or mixtures meeting the criteria for classification in this hazard class in accordance with Table 2.8.1.

Table 2.8.1
Label elements for self-reactive substances and mixtures

Classification	Type A	Type B	Type C & D	Type E & F	Type G
GHS Pictograms					There are no label elements allocated to this hazard category
Signal Word	Danger	Danger	Danger	Warning	
Hazard Statement	H240: Heating may cause an explosion	H241: Heating may cause a fire or explosion	H242: Heating may cause a fire	H242: Heating may cause a fire	
Precautionary Statement Prevention	P210 P220 P234 P280	P210 P220 P234 P280	P210 P220 P234 P280	P210 P220 P234 P280	
Precautionary Statement Response	P370 + P378 P370 + P380 + P375	P370 + P378 P370 + P380 + P375	P370 + P378	P370 + P378	

Precautionary Statement Storage	P403 + P235 P411 P420	P403 + P235 P411 P420	P403 + P235 P411 P420	P403 + P235 P411 P420	
Precautionary Statement Disposal	P501	P501	P501	P501	

Type G has no hazard communication elements assigned but shall be considered for properties belonging to other hazard classes.

2.8.4. Additional Classification Considerations

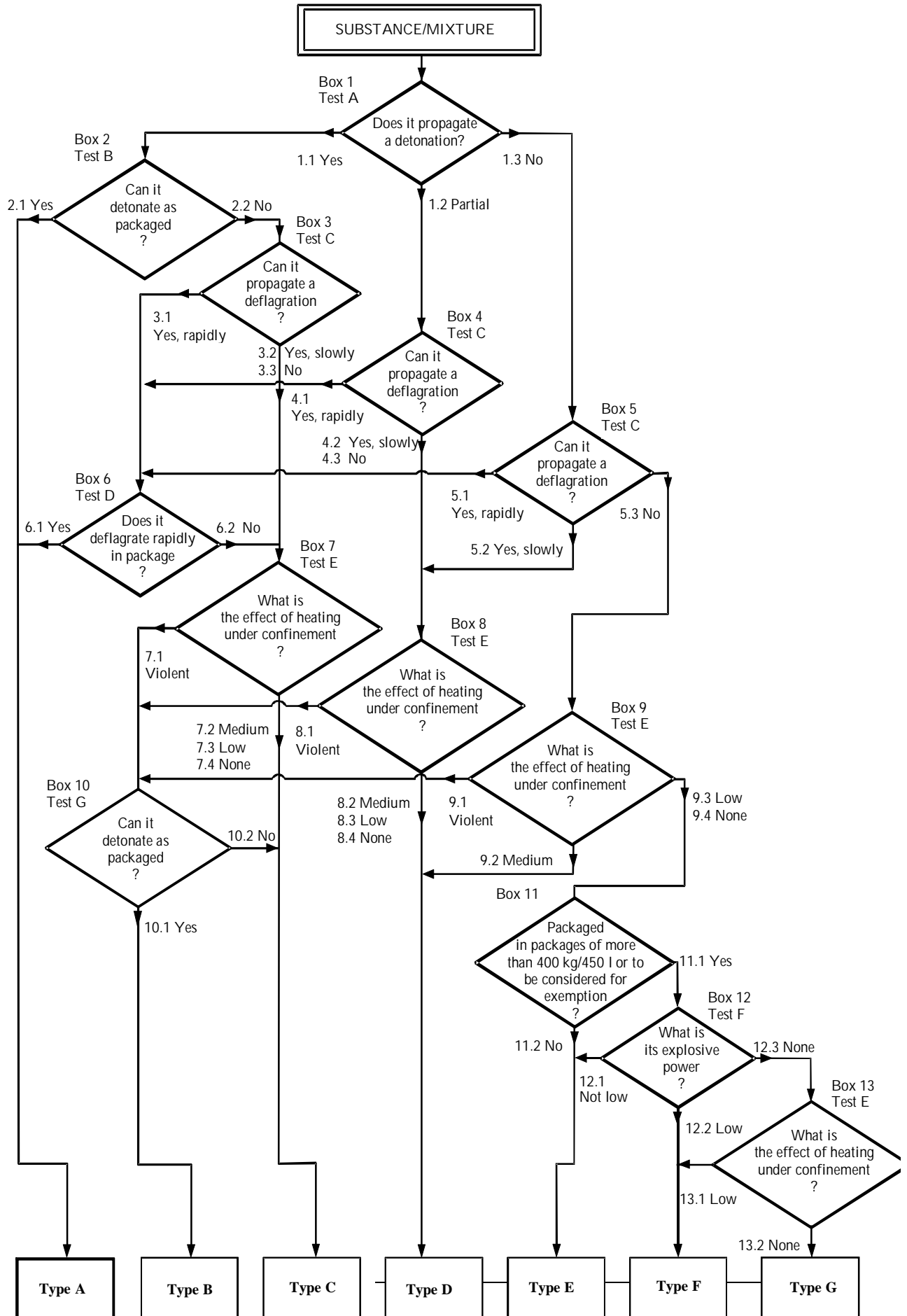
2.8.4.1. The properties of self-reactive substances or mixtures which are decisive for their classification shall be determined experimentally. The classification of a self reactive substance or mixture shall be performed in accordance with test series A to H as described in Part II of the UN RTDG, Manual of Tests and Criteria. The procedure for classification is described in Figure 2.8.1.

2.8.4.2. The classification procedures for self-reactive substances and mixtures need not be applied if:

- (a) There are no chemical groups present in the molecule associated with explosive or self reactive properties. Examples of such groups are given in Tables A6.1 and A6.2 in Appendix 6 of the UN RTDG, Manual of Tests and Criteria; or
- (b) For a single organic substance or a homogeneous mixture of organic substances, the estimated SADT for a 50 kg package is greater than 75°C or the exothermic decomposition energy is less than 300J/g. The onset temperature and decomposition energy can be estimated using a suitable calorimetric technique (see Part II, sub-section 20.3.3.3 of the UN RTDG, Manual of Tests and Criteria).

Figure 2.8.1

Self-reactive substances and mixtures



2.9. PYROPHORIC LIQUIDS

2.9.1. Definition

Pyrophoric liquid means a liquid substance or mixture which, even in small quantities, is liable to ignite within five minutes after coming into contact with air.

2.9.2. Classification criteria

2.9.2.1. A pyrophoric liquid shall be classified in a single category for this class using test N.3 in Part III, sub-section 33.3.1.5 of the UN RTDG, Manual of Tests and Criteria according to Table 2.9.1:


Table 2.9.1
Criteria for pyrophoric liquids

Category	Criteria
1	The liquid ignites within 5 min when added to an inert carrier and exposed to air, or it ignites or chars a filter paper on contact with air within 5 min.

2.9.3. Hazard Communication

Label elements shall be used for substances or mixtures meeting the criteria for classification in this hazard class in accordance with Table 2.9.2.

Table 2.9.2**Label elements for pyrophoric liquids**

Classification	Category 1
GHS Pictogram	
Signal Word	Danger
Hazard Statement	H250: Catches fire spontaneously if exposed to air
Precautionary Statement Prevention	P210 P222 P280
Precautionary Statement Response	P302 + P334 P370 + P378
Precautionary Statement Storage	P422
Precautionary Statement Disposal	

2.9.4. Additional Classification Considerations

2.9.4.1. The classification procedure for pyrophoric liquids need not be applied when experience in manufacture or handling shows that the substance or mixture does not ignite spontaneously on coming into contact with air at normal temperatures (i.e. the substance is known to be stable at room temperature for prolonged periods of time (days)).

2.10. PYROPHORIC SOLIDS**2.10.1. Definition**

Pyrophoric solid means a solid substance or mixture which, even in small quantities, is liable to ignite within five minutes after coming into contact with air.

2.10.2. Classification criteria

2.10.2.1. A pyrophoric solid shall be classified in a single category for this class using test N.2 in Part III, sub-section 33.3.1.4 of the UN RTDG, Manual of Tests and Criteria in accordance with Table 2.10.1:

Table 2.10.1
Criteria for pyrophoric solids

Category	Criteria
1	The solid ignites within 5 minutes of coming into contact with air.


Note:

The test shall be performed on the substance or mixture in its physical form as presented. If, for example, for the purposes of supply or transport, the same chemical is to be presented in a physical form different from that which was tested and which is considered likely to materially alter its performance in a classification test, the substance shall also be tested in the new form.

2.10.3. Hazard Communication

Label elements shall be used for substances or mixtures meeting the criteria for classification in this hazard class in accordance with Table 2.10.2.

Table 2.10.2
Label elements for pyrophoric solids

Classification	Category 1
GHS Pictogram	
Signal Word	Danger
Hazard Statement	H250: Catches fire spontaneously if exposed to air
Precautionary Statement Prevention	P210 P222 P280
Precautionary Statement Response	P335 + P334 P370 + P378

Precautionary Statement Storage	P422
Precautionary Statement Disposal	

2.10.4. Additional Classification Considerations

2.10.4.1. The classification procedure for pyrophoric solids need not be applied when experience in manufacture or handling shows that the substance or mixture does not ignite spontaneously on coming into contact with air at normal temperatures (i.e. the substance is known to be stable at room temperature for prolonged periods of time (days)).

2.11. SELF-HEATING SUBSTANCES AND MIXTURES

2.11.1. Definition

2.11.1.1. A self-heating substance or mixture is a liquid or solid substance or mixture, other than a pyrophoric liquid or solid, which, by reaction with air and without energy supply, is liable to self-heat; this substance or mixture differs from a pyrophoric liquid or solid in that it will ignite only when in large amounts (kilograms) and after long periods of time (hours or days).

2.11.1.2. Self-heating of a substance or mixture is a process where the gradual reaction of that substance or mixture with oxygen (in the air) generates heat. If the rate of heat production exceeds the rate of heat loss, then the temperature of the substance or mixture will rise which, after an induction time, may lead to self-ignition and combustion.

2.11.2. Classification criteria

2.11.2.1. A substance or mixture shall be classified as a self-heating substance or mixture of this class, if in the tests performed in accordance with the test method given in the UN RTDG, Manual of Tests and Criteria, Part III, sub-section 33.3.1.6:

- (a) a positive result is obtained using a 25 mm cube sample at 140°C;
- (b) a positive result is obtained in a test using a 100 mm sample cube at 140°C and a negative result is obtained in a test using a 100 mm cube sample at 120°C and the substance or mixture is to be packed in packages with a volume of more than 3 m³;

- (c) a positive result is obtained in a test using a 100 mm sample cube at 140°C and a negative result is obtained in a test using a 100 mm cube sample at 100°C and the substance or mixture is to be packed in packages with a volume of more than 450 litres;
- (d) a positive result is obtained in a test using a 100 mm sample cube at 140°C and a positive result is obtained in a test using a 100 mm cube sample at 100°C.

2.11.2.2.A self-heating substance or mixture shall be classified in one of the two categories for this class if, in a test performed in accordance with test method N.4 in Part III, sub-section 33.3.1.6 of the UN RTDG, Manual of Tests and Criteria, the result meets the criteria according to Table 2.11.1:

Table 2.11.1
Criteria for self-heating substances and mixtures

Category	Criteria
1	A positive result is obtained in a test using a 25 mm sample cube at 140°C
2	<ul style="list-style-type: none"> (a) a positive result is obtained in a test using a 100 mm sample cube at 140°C and a negative result is obtained in a test using a 25 mm cube sample at 140°C and the substance or mixture is to be packed in packages with a volume of more than 3 m³; or (b) a positive result is obtained in a test using a 100 mm sample cube at 140°C and a negative result is obtained in a test using a 25 mm cube sample at 140°C, a positive result is obtained in a test using a 100 mm cube sample at 120°C and the substance or mixture is to be packed in packages with a volume of more than 450 litres; or (c) a positive result is obtained in a test using a 100 mm sample cube at 140°C and a negative result is obtained in a test using a 25 mm cube sample at 140°C <u>and</u> a positive result is obtained in a test using a 100 mm cube sample at 100°C.

Note:

The test shall be performed on the substance or mixture in its physical form as presented. If, for example, for the purposes of supply or transport, the same chemical is to be presented in a physical form different from that which was tested and which is considered likely to materially alter its performance in a classification test, the substance shall also be tested in the new form.



2.11.2.3. Substances and mixtures with a temperature of spontaneous combustion higher than 50°C for a volume of 27 m³ shall not be classified as a self-heating substance or mixture.

2.11.2.4. Substances and mixtures with a spontaneous ignition temperature higher than 50°C for a volume of 450 litres shall not be assigned to Category 1 of this class.

2.11.3. Hazard Communication

Label elements shall be used for substances or mixtures meeting the criteria for classification in this hazard class in accordance with Table 2.11.2.

Table 2.11.2
Label elements for self-heating substances and mixtures

Classification	Category 1	Category 2
GHS Pictograms		
Signal Word	Danger	Warning
Hazard Statement	H251: Self-heating; may catch fire	H252: Self-heating in large quantities; may catch fire
Precautionary Statement Prevention	P235 + P410 P280	P235 + P410 P280
Precautionary Statement Response		
Precautionary Statement Storage	P407 P413 P420	P407 P413 P420
Precautionary Statement Disposal		

2.11.4. Additional Classification Considerations

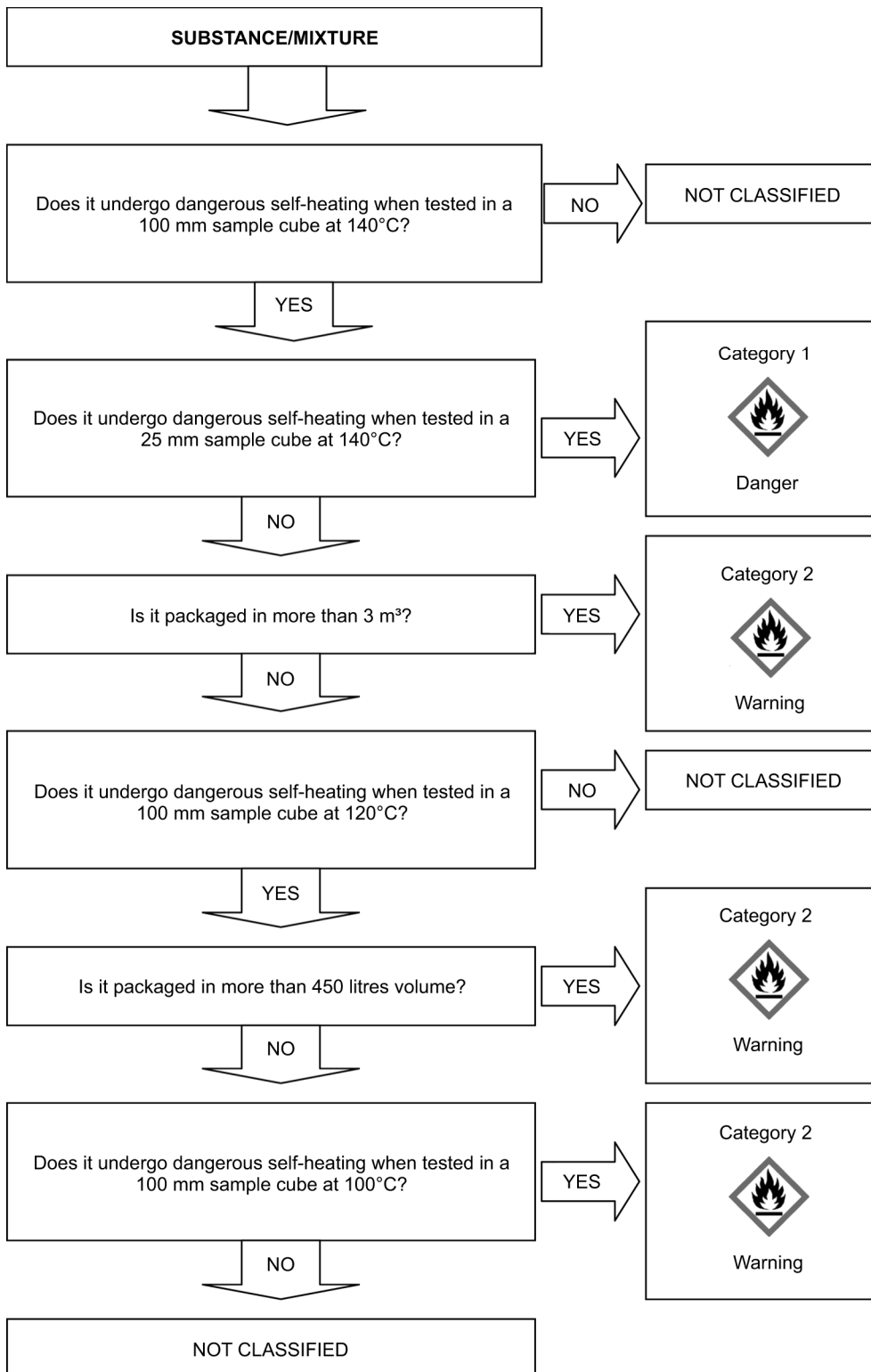
2.11.4.1. For detailed schemes for the decision logic for classification and the tests to be carried out for ascertaining the different categories, see Figure 2.11.1.

2.11.4.2. The classification procedure for self-heating substances or mixtures need not be applied if the results of a screening test can be adequately correlated with the classification test and an appropriate safety margin is applied. Examples of screening tests are:

- (a) The Grewer Oven test (VDI guideline 2263, Part 1, 1990, Test methods for the Determination of the Safety Characteristics of Dusts) with an onset temperature 80 K above the reference temperature for a volume of 1 l;
- (b) The Bulk Powder Screening Test (Gibson, N. Harper, D.J. Rogers, R. Evaluation of the fire and explosion risks in drying powders, *Plant Operations Progress*, 4 (3), 181-189, 1985) with an onset temperature 60 K above the reference temperature for a volume of 1 l.

Figure 2.11.1.

Self-heating substances and mixtures



2.12. SUBSTANCES AND MIXTURES WHICH IN CONTACT WITH WATER EMIT FLAMMABLE GASES

2.12.1. Definition

Substances or mixtures which, in contact with water, emit flammable gases means solid or liquid substances or mixtures which, by interaction with water, are liable to become spontaneously flammable or to give off flammable gases in dangerous quantities.

2.12.2. Classification criteria

2.12.2.1. A substance or mixture which, in contact with water, emits flammable gases shall be classified in one of the three categories for this class, using test N.5 in Part III, sub-section 33.4.1.4 of the UN RTDG, Manual of Tests and Criteria, in accordance with Table 2.12.1:

Table 2.12.1

Criteria for substances or mixtures which in contact with water emit flammable gases

Category	Criteria
1	Any substance or mixture which reacts vigorously with water at ambient temperatures and demonstrates generally a tendency for the gas produced to ignite spontaneously, or which reacts readily with water at ambient temperatures such that the rate of evolution of flammable gas is equal to or greater than 10 litres per kilogram of substance over any one minute.
2	Any substance or mixture which reacts readily with water at ambient temperatures such that the maximum rate of evolution of flammable gas is equal to or greater than 20 litres per kilogram of substance per hour, and which does not meet the criteria for Category 1.
3	Any substance or mixture which reacts slowly with water at ambient temperatures such that the maximum rate of evolution of flammable gas is equal to or greater than 1 litre per kilogram of substance per hour, and which does not meet the criteria for Categories 1 and 2.

Note:




The test shall be performed on the substance or mixture in its physical form as presented. If, for example, for the purposes of supply or transport, the same chemical is to be presented in a physical form different from that which was tested and which is considered likely to materially alter its performance in a classification test, the substance must also be tested in the new form.

2.12.2.2. A substance or mixture shall be classified as a substance or mixture which in contact with water emits flammable gases if spontaneous ignition takes place in any step of the test procedure.

2.12.3. Hazard Communication

Label elements shall be used for substances or mixtures meeting the criteria for classification in this hazard class in accordance with Table 2.12.2.

Table 2.12.2
Label elements for substances or mixtures which
in contact with water emit flammable gases

Classification	Category 1	Category 2	Category 3
GHS Pictograms			
Signal Word	Danger	Danger	Warning
Hazard Statement	H260: In contact with water releases flammable gases which may ignite spontaneously	H261: In contact with water releases flammable gases	H261: In contact with water releases flammable gases
Precautionary Statement Prevention	P223 P231 + P232 P280	P223 P231 + P232 P280	P231 + P232 P280
Precautionary Statement Response	P335 + P334 P370 + P378	P335 + P334 P370 + P378	P370 + P378
Precautionary Statement Storage	P402 + P404	P402 + P404	P402 + P404
Precautionary Statement Disposal	P501	P501	P501

2.12.4. Additional Classification Considerations

2.12.4.1. The classification procedure for this class need not be applied if:

- (a) the chemical structure of the substance or mixture does not contain metals or metalloids; or

- (b) experience in production or handling shows that the substance or mixture does not react with water, e.g. the substance is manufactured with water or washed with water; or
- (c) the substance or mixture is known to be soluble in water to form a stable mixture.

2.13. OXIDISING LIQUIDS

2.13.1. Definition

Oxidising liquid means a liquid substance or mixture which, while in itself not necessarily combustible, may, generally by yielding oxygen, cause, or contribute to, the combustion of other material.

2.13.2. Classification criteria

2.13.2.1. An oxidising liquid shall be classified in one of the three categories for this class using test O.2 in Part III, sub-section 34.4.2 of the UN RTDG, Manual of Tests and Criteria in accordance with Table 2.13.1:




Table 2.13.1
Criteria for oxidising liquids

Category	Criteria
1	Any substance or mixture which, in the 1:1 mixture, by mass, of substance (or mixture) and cellulose tested, spontaneously ignites; or the mean pressure rise time of a 1:1 mixture, by mass, of substance (or mixture) and cellulose is less than that of a 1:1 mixture, by mass, of 50 % perchloric acid and cellulose.
2	Any substance or mixture which, in the 1:1 mixture, by mass, of substance (or mixture) and cellulose tested, exhibits a mean pressure rise time less than or equal to the mean pressure rise time of a 1:1 mixture, by mass, of 40 % aqueous sodium chlorate solution and cellulose; and the criteria for Category 1 are not met.
3	Any substance or mixture which, in the 1:1 mixture, by mass, of substance (or mixture) and cellulose tested, exhibits a mean pressure rise time less than or equal to the mean pressure rise time of a 1:1 mixture, by mass, of 65 % aqueous nitric acid and cellulose; and the criteria for Category 1 and 2 are not met.

2.13.3. Hazard Communication

Label elements shall be used for substances or mixtures meeting the criteria for classification in this hazard class in accordance with Table 2.13.2.

Table 2.13.2
Label elements for oxidising liquids

Classification	Category 1	Category 2	Category 3
GHS Pictograms			
Signal Word	Danger	Danger	Warning
Hazard Statement	H271: May cause fire or explosion; strong oxidiser	H272: May intensify fire; oxidiser	H272: May intensify fire; oxidiser
Precautionary Statement Prevention	P210 P220 P221 P280 P283	P210 P220 P221 P280	P210 P220 P221 P280
Precautionary Statement Response	P306 + P360 P371 + P380 + P375 P370 + P378	P370 + P378	P370 + P378
Precautionary Statement Storage			
Precautionary Statement Disposal	P501	P501	P501

2.13.4. Additional Classification Considerations

2.13.4.1. For organic substances or mixtures the classification procedure for this class shall not apply if:

- the substance or mixture does not contain oxygen, fluorine or chlorine; or
- the substance or mixture contains oxygen, fluorine or chlorine and these elements are chemically bonded only to carbon or hydrogen.

2.13.4.2. For inorganic substances or mixtures the classification procedure for this class shall not apply if they do not contain oxygen or halogen atoms.

2.13.4.3. In the event of divergence between test results and known experience in the handling and use of substances or mixtures which shows them to be oxidising, judgments based on known experience shall take precedence over test results.

2.13.4.4. In cases where substances or mixtures generate a pressure rise (too high or too low), caused by chemical reactions not characterising the oxidising properties of the substance or mixture, the test described in Part III, sub-section 34.4.2 of the UN RTDG, Manual of Tests and Criteria shall be repeated with an inert substance, e.g. diatomite (kieselguhr), in place of the cellulose in order to clarify the nature of the reaction and to check for a false positive result.

2.14. OXIDISING SOLIDS

2.14.1. Definition

Oxidising solid means a solid substance or mixture which, while in itself is not necessarily combustible, may, generally by yielding oxygen, cause, or contribute to, the combustion of other material.

2.14.2. Classification criteria

2.14.2.1. An oxidising solid shall be classified in one of the three categories for this class using test O.1 in Part III, sub-section 34.4.1 of the UN RTDG, Manual of Tests and Criteria in accordance with Table 2.14.1:

Table 2.14.1
Criteria for oxidising solids

Category	Criteria
1	Any substance or mixture which, in the 4:1 or 1:1 sample-to-cellulose ratio (by mass) tested, exhibits a mean burning time less than the mean burning time of a 3:2 mixture, by mass, of potassium bromate and cellulose.
2	Any substance or mixture which, in the 4:1 or 1:1 sample-to-cellulose ratio (by mass) tested, exhibits a mean burning time equal to or less than the mean burning time of a 2:3 mixture (by mass) of potassium bromate and cellulose and the criteria for Category 1 are not met.
3	Any substance or mixture which, in the 4:1 or 1:1 sample-to-cellulose ratio (by mass) tested, exhibits a mean burning time equal to or less than the mean burning time of a 3:7 mixture (by mass) of potassium bromate and cellulose and the criteria for Categories 1 and 2 are not met.

Note 1:

Some oxidising solids also present explosion hazards under certain conditions (when stored in large quantities). Some types of ammonium nitrate may give rise to an explosion hazard under extreme conditions and the "Resistance to detonation test" (BC Code, Annex 3, Test 5) can be used to assess this hazard. Appropriate information shall be made in the SDS.




Note 2:

The test shall be performed on the substance or mixture in its physical form as presented. If, for example, for the purposes of supply or transport, the same chemical is to be presented in a physical form different from that which was tested and which is considered likely to materially alter its performance in a classification test, the substance shall also be tested in the new form.

2.14.3. Hazard Communication

Label elements shall be used for substances or mixtures meeting the criteria for classification in this hazard class in accordance with Table 2.14.2.

Table 2.14.2
Label elements for oxidising solids

	Category 1	Category 2	Category 3
GHS Pictograms			
Signal Word	Danger	Danger	Warning
Hazard Statement	H271: May cause fire or explosion; strong oxidiser	H272: May intensify fire; oxidiser	H272: May intensify fire; oxidiser
Precautionary Statement Prevention	P210 P220 P221 P280 P283	P210 P220 P221 P280	P210 P220 P221 P280
Precautionary Statement Response	P306 + P360 P371 + P380 + P375 P370 + P378	P370 + P378	P370 + P378
Precautionary Statement Storage			
Precautionary Statement Disposal	P501	P501	P501

2.14.4. Additional Classification Considerations

2.14.4.1. For organic substances or mixtures the classification procedure for this class shall not apply if:

- (a) the substance or mixture does not contain oxygen, fluorine or chlorine; or

- (b) the substance or mixture contains oxygen, fluorine or chlorine and these elements are chemically bonded only to carbon or hydrogen.

2.14.4.2. For inorganic substances or mixtures the classification procedure for this class shall not apply if they do not contain oxygen or halogen atoms.

2.14.4.3. In the event of divergence between test results and known experience in the handling and use of substances or mixtures which shows them to be oxidising, judgments based on known experience shall take precedence over test results.

2.15. ORGANIC PEROXIDES

2.15.1. Definition

2.15.1.1. Organic peroxides means liquid or solid organic substances which contain the bivalent -O-O- structure and may be considered derivatives of hydrogen peroxide, where one or both of the hydrogen atoms have been replaced by organic radicals. The term organic peroxide includes organic peroxide mixtures (formulations) containing at least one organic peroxide. Organic peroxides are thermally unstable substances or mixtures, which can undergo exothermic self-accelerating decomposition. In addition, they can have one or more of the following properties:

- (i) be liable to explosive decomposition;
- (ii) burn rapidly;
- (iii) be sensitive to impact or friction;
- (iv) react dangerously with other substances.

2.15.1.2. An organic peroxide is regarded as possessing explosive properties when in laboratory testing the mixture (formulation) is liable to detonate, to deflagrate rapidly or to show a violent effect when heated under confinement.

2.15.2. Classification criteria

2.15.2.1. Any organic peroxide shall be considered for classification in this class, unless it contains:

- (a) not more than 1,0 % available oxygen from the organic peroxides when containing not more than 1,0 % hydrogen peroxide; or

- (b) not more than 0,5 % available oxygen from the organic peroxides when containing more than 1,0 % but not more than 7,0 % hydrogen peroxide.

NOTE:

The available oxygen content (%) of an organic peroxide mixture is given by the formula:

$$16 \times \sum_i^n \left(\frac{n_i \times c_i}{m_i} \right)$$

where:

n_i = number of peroxygen groups per molecule of organic peroxide i;

c_i = concentration (mass %) of organic peroxide i;

m_i = molecular mass of organic peroxide i.

2.15.2.2. Organic peroxides shall be classified in one of the seven categories of "Types A to G" for this class, according to the following principles:

- (a) any organic peroxide which, as packaged, can detonate or deflagrate rapidly shall be defined as organic peroxide TYPE A;
- (b) any organic peroxide possessing explosive properties and which, as packaged, neither detonates nor deflagrates rapidly, but is liable to undergo a thermal explosion in that package shall be defined as organic peroxide TYPE B;
- (c) any organic peroxide possessing explosive properties when the substance or mixture as packaged cannot detonate or deflagrate rapidly or undergo a thermal explosion shall be defined as organic peroxide TYPE C;
- (d) any organic peroxide which in laboratory testing:
- (i) detonates partially, does not deflagrate rapidly and shows no violent effect when heated under confinement; or
 - (ii) does not detonate at all, deflagrates slowly and shows no violent effect when heated under confinement; or

(iii) does not detonate or deflagrate at all and shows a medium effect when heated under confinement;

shall be defined as organic peroxide TYPE D;

- (e) any organic peroxide which, in laboratory testing, neither detonates nor deflagrates at all and shows low or no effect when heated under confinement shall be defined as organic peroxide TYPE E;
- (f) any organic peroxide which, in laboratory testing, neither detonates in the cavitated state nor deflagrates at all and shows only a low or no effect when heated under confinement as well as low or no explosive power shall be defined as organic peroxide TYPE F;
- (g) any organic peroxide which, in laboratory testing, neither detonates in the cavitated state nor deflagrates at all and shows no effect when heated under confinement nor any explosive power, provided that it is thermally stable, i.e. the SADT is 60°C or higher for a 50 kg package¹, and, for liquid mixtures, a diluent having a boiling point of not less than 150°C is used for desensitisation, shall be defined as organic peroxide TYPE G. If the organic peroxide is not thermally stable or a diluent having a boiling point less than 150°C is used for desensitisation, the organic peroxide shall be defined as organic peroxide TYPE F.

Where the test is conducted in the package form and the packaging is changed, a further test shall be conducted where it is considered that the change in packaging will affect the outcome of the test.

2.15.2.3. Criteria for temperature control

The following organic peroxides need to be subjected to temperature control:

- (a) Organic peroxide types B and C with an SADT • 50 C;

¹ See UN RTDG, Manual of Tests and Criteria, sub-sections 28.1, 28.2, 28.3 and Table 28.3.

- (b) Organic peroxide type D showing a medium effect when heated under confinement¹ with an SADT • 50°C or showing a low or no effect when heated under confinement with an SADT • 45°C; and
- (c) Organic peroxide types E and F with an SADT • 45°C.





Test methods for determining the SADT as well as the derivation of control and emergency temperatures are given in the UN RTDG, Manual of Tests and Criteria, Part II, section 28. The test selected shall be conducted in a manner which is representative, both in size and material, of the package.

2.15.3. Hazard Communication

Label elements shall be used for substances or mixtures meeting the criteria for classification in this hazard class in accordance with Table 2.15.1.

¹ As determined by test series E as prescribed in UN RTDG, Manual of Tests and Criteria, Part II.

Table 2.15.1
Label elements for organic peroxides

Classification	Type A	Type B	Type C & D	Type E & F	Type G
GHS Pictograms					There are no label elements allocated to this hazard category
Signal Word	Danger	Danger	Danger	Warning	
Hazard Statement	H240: Heating may cause an explosion	H241: Heating may cause a fire or explosion	H242: Heating may cause a fire	H242: Heating may cause a fire	
Precautionary Statement Prevention	P210 P220 P234 P280	P210 P220 P234 P280	P210 P220 P234 P280	P210 P220 P234 P280	
Precautionary Statement Response					
Precautionary Statement Storage	P411 + P235 P410 P420	P411 + P235 P410 P420	P411 + P235 P410 P420	P411 + P235 P410 P420	
Precautionary Statement Disposal	P501	P501	P501	P501	

Type G has no hazard communication elements assigned but shall be considered for properties belonging to other hazard classes.

2.15.4. Additional Classification Considerations

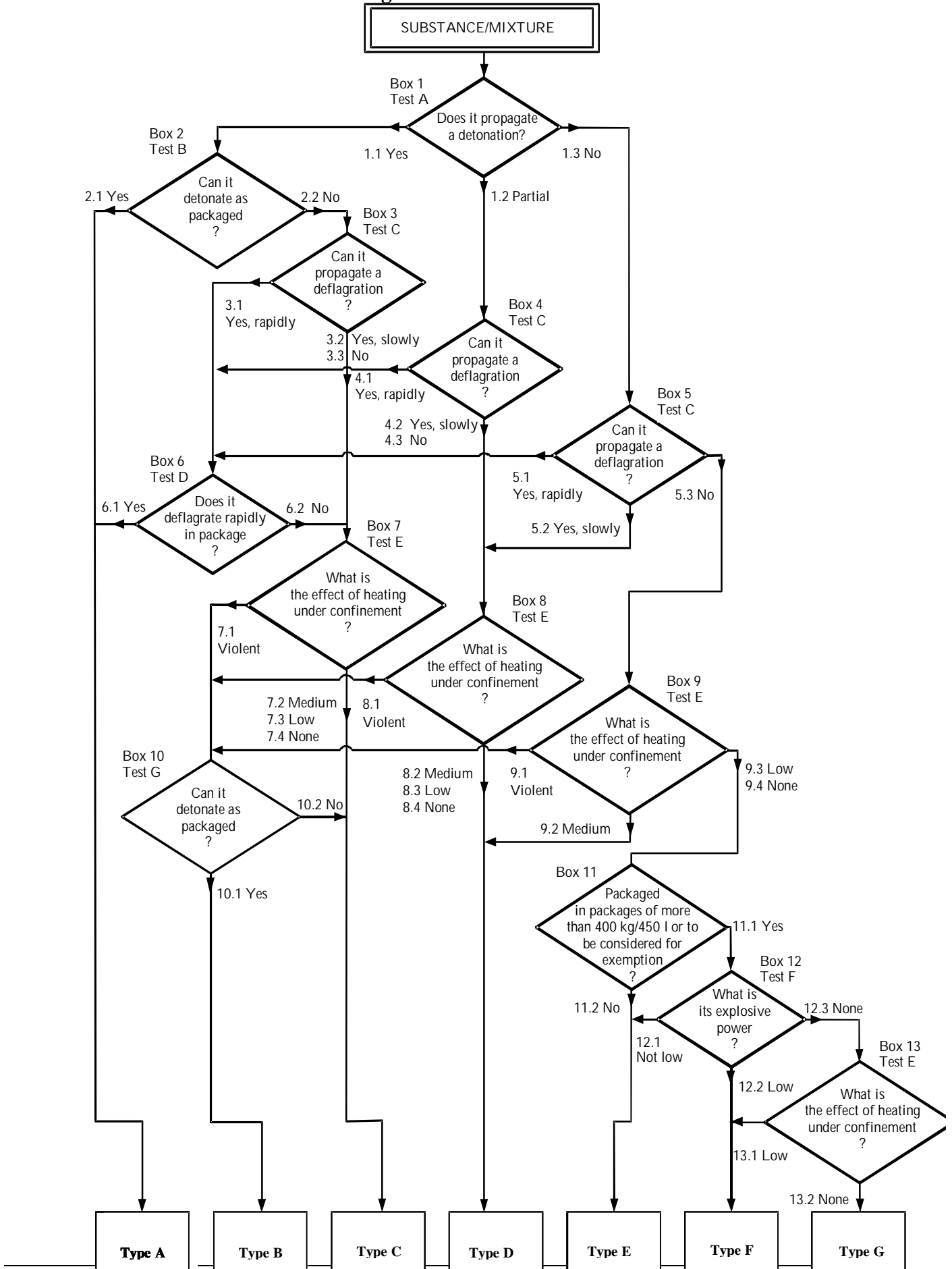
2.15.4.1. Organic peroxides are classified by definition based on their chemical structure and on the available oxygen and hydrogen peroxide contents of the mixture (see 2.15.2.1). The properties of organic peroxides which are necessary for their classification shall be determined experimentally. The classification of organic peroxides shall be performed in

accordance with test series A to H as described in Part II of the UN RTDG, Manual of Tests and Criteria. The procedure for classification is described in Figure 2.15.1.

2.15.4.2. Mixtures of already classified organic peroxides may be classified as the same type of organic peroxide as that of the most dangerous component. However, as two stable components can form a thermally less stable mixture, the SADT of the mixture shall be determined.

Note: The sum of the individual parts can be more hazardous than the individual components.

**Figure 2.15.1
Organic Peroxides**



2.16. CORROSIVE TO METALS

2.16.1. Definition

A substance or a mixture that is corrosive to metals means a substance or a mixture which by chemical action will materially damage, or even destroy, metals.

2.16.2. Classification criteria

2.16.2.1. A substance or a mixture which is corrosive to metals is classified in a single category for this class, using the test in Part III, sub-section 37.4 of the UN RTDG, Manual of Tests and Criteria, in accordance with Table 2.16.1:

Table 2.16.1
Criteria for substances and mixtures corrosive to metals

Category	Criteria
1	Corrosion rate on either steel or aluminium surfaces exceeding 6,25 mm per year at a test temperature of 55°C when tested on both materials.

Note:


Where an initial test on either steel or aluminium indicates the substance or mixture being tested is corrosive the follow up test on the other metal is not required.

2.16.3. Hazard Communication

Label elements shall be used for substances and mixtures meeting the criteria for classification in this hazard class in accordance with Table 2.16.2.

Table 2.16.2

Label elements for substances and mixtures corrosive to metals

Classification	Category 1
GHS Pictogram	
Signal Word	Warning
Hazard Statement	H290: May be corrosive to metals
Precautionary Statement Prevention	P234
Precautionary Statement Response	P390
Precautionary Statement Storage	P406
Precautionary Statement Disposal	

2.16.4. Additional Classification Considerations

2.16.4.1. The corrosion rate can be measured according to the test method of Part III sub-section 37.4 of the UN RTDG, Manual of Tests and Criteria. The specimen to be used for the test shall be made of the following materials:

- (a) for the purposes of testing steel, steel types
 - S235JR+CR (1.0037 resp. St 37-2),
 - S275J2G3+CR (1.0144 resp. St 44-3), ISO 3574 as amended, Unified Numbering System (UNS) G 10200, or SAE 1020;
- (b) for the purposes of testing aluminium: non-clad types 7075-T6 or AZ5GU-T6.

3. PART 3: HEALTH HAZARDS

3.1. ACUTE TOXICITY

3.1.1. Definitions

3.1.1.1. Acute toxicity means those adverse effects occurring following oral or dermal administration of a single dose of a substance or a mixture, or multiple doses given within 24 hours, or an inhalation exposure of 4 hours.

3.1.1.2. The hazard class Acute Toxicity is differentiated into:

- Acute oral toxicity;
- Acute dermal toxicity;
- Acute inhalation toxicity.

3.1.2. Criteria for classification of substances as acutely toxic

3.1.2.1. Substances can be allocated to one of four toxicity categories based on acute toxicity by the oral, dermal or inhalation route according to the numeric criteria shown in Table 3.1.1. Acute toxicity values are expressed as (approximate) LD₅₀ (oral, dermal) or LC₅₀ (inhalation) values or as acute toxicity estimates (ATE). Explanatory notes are shown following Table 3.1.1.

Table 3.1.1
Acute toxicity hazard categories and
acute toxicity estimates (ATE) defining the respective categories

Exposure Route	Category 1	Category 2	Category 3	Category 4
Oral (mg/kg bodyweight) See Note (a) Note (b)	ATE • 5	5 < ATE • 50	50 < ATE • 300	300 < ATE • 2000
Dermal (mg/kg bodyweight) See Note (a) Note (b)	ATE • 50	50 < ATE • 200	200 < ATE • 1000	1000 < ATE • 2000
Gases (ppmV ¹) see: Note (a) Note (b) Note (c)	ATE • 100	100 < ATE • 500	500 < ATE • 2500	2500 < ATE • 20000
Vapours (mg/l) see: Note (a) Note (b) Note (c) Note (d)	ATE • 0,5	0,5 < ATE • 2,0	2,0 < ATE • 10,0	10,0 < ATE • 20,0
Dusts and Mists (mg/l) see: Note (a) Note (b) Note (c)	ATE • 0,05	0,05 < ATE • 0,5	0,5 < ATE • 1,0	1,0 < ATE • 5,0

Notes to Table 3.1.1:

- (a) The acute toxicity estimate (ATE) for the classification of a substance is derived using the LD₅₀/LC₅₀ where available;
- (b) The acute toxicity estimate (ATE) for the classification of a substance in a mixture is derived using:
- the LD₅₀/LC₅₀ where available,
 - the appropriate conversion value from Table 3.1.2 that relates to the results of a range test, or

¹ Gas concentrations are expressed in parts per million per volume (ppmV)

- the appropriate conversion value from Table 3.1.2 that relates to a classification category.
- (c) Generic concentration limits for inhalation toxicity in the table are based on 4 hour testing exposures. Conversion of existing inhalation toxicity data which have been generated using a 1 hour exposure can be carried out by dividing by a factor of 2 for gases and vapours and 4 for dusts and mists.
- (d) For some substances the test atmosphere will not just be a vapour but will consist of a mixture of liquid and vapour phases. For other substances the test atmosphere may consist of a vapour which is near the gaseous phase. In these latter cases, classification shall be based on ppmV as follows: Category 1 (100 ppmV), Category 2 (500 ppmV), Category 3 (2500 ppmV), Category 4 (20000 ppmV).

The terms “dust”, “mist” and “vapour” are defined as follows:

- Dust: solid particles of a substance or mixture suspended in a gas (usually air);
- Mist: liquid droplets of a substance or mixture suspended in a gas (usually air);
- Vapour: the gaseous form of a substance or mixture released from its liquid or solid state.

Dust is generally formed by mechanical processes. Mist is generally formed by condensation of supersaturated vapours or by physical shearing of liquids. Dusts and mists generally have sizes ranging from less than 1 to about 100 µm.

3.1.2.2. *Specific considerations for classification of substances as acutely toxic*

- 3.1.2.2.1. The preferred test species for evaluation of acute toxicity by the oral and inhalation routes is the rat, while the rat or rabbit are preferred for evaluation of acute dermal toxicity. When experimental data for acute toxicity are available in several animal species, scientific judgement shall be used in selecting the most appropriate LD50 value from among valid, well-performed tests.

3.1.2.3. *Specific considerations for classification of substances as acutely toxic by the inhalation route*

- 3.1.2.3.1. Units for inhalation toxicity are a function of the form of the inhaled material. Values for dusts and mists are expressed in mg/l. Values for gases are expressed in ppmV. Acknowledging the difficulties in testing vapours, some of which consist of mixtures of liquid and vapour phases, the table provides values in units of mg/l. However, for those vapours which are near the gaseous phase, classification shall be based on ppmV.
- 3.1.2.3.2. Of particular importance in classifying for inhalation toxicity is the use of well articulated values in the high toxicity categories for dusts and mists. Inhaled particles between 1 and 4 microns mean mass aerodynamic diameter (mmad) will deposit in all regions of the rat respiratory tract. This particle size range corresponds to a maximum dose of about 2 mg/l. In order to achieve applicability of animal experiments to human exposure, dusts and mists would ideally be tested in this range in rats.
- 3.1.2.3.3. In addition to classification for inhalation toxicity, if data are available that indicates that the mechanism of toxicity was corrosivity, the substance or mixture shall also be labelled as "corrosive to the respiratory tract" (see note 1 in 3.1.4.1). Corrosion of the respiratory tract is defined by destruction of the respiratory tract tissue after a single, limited period of exposure analogous to skin corrosion; this includes destruction of the mucosa. The corrosivity evaluation can be based on expert judgment using such evidence as: human and animal experience, existing (in vitro) data, pH values, information from similar substances or any other pertinent data.

3.1.3. Criteria for classification of mixtures as acutely toxic

- 3.1.3.1. The criteria for classification of substances for acute toxicity as outlined in section 3.1.2 are based on lethal dose data (tested or derived). For mixtures, it is necessary to obtain or derive information that allows the criteria to be applied to the mixture for the purpose of classification. The approach to classification for acute toxicity is tiered, and is dependent upon the amount of information available for the mixture itself and for its ingredients. The flow chart of Figure 3.1.1 outlines the process to be followed.
- 3.1.3.2. For acute toxicity each route of exposure shall be considered for the classification of mixtures, but only one route of exposure is needed as long as this route is followed (estimated or tested) for all components and there is no relevant evidence to suggest acute toxicity by multiple routes. When there is relevant evidence of toxicity by multiple routes of exposure, classification is to be conducted for all appropriate routes of exposure.

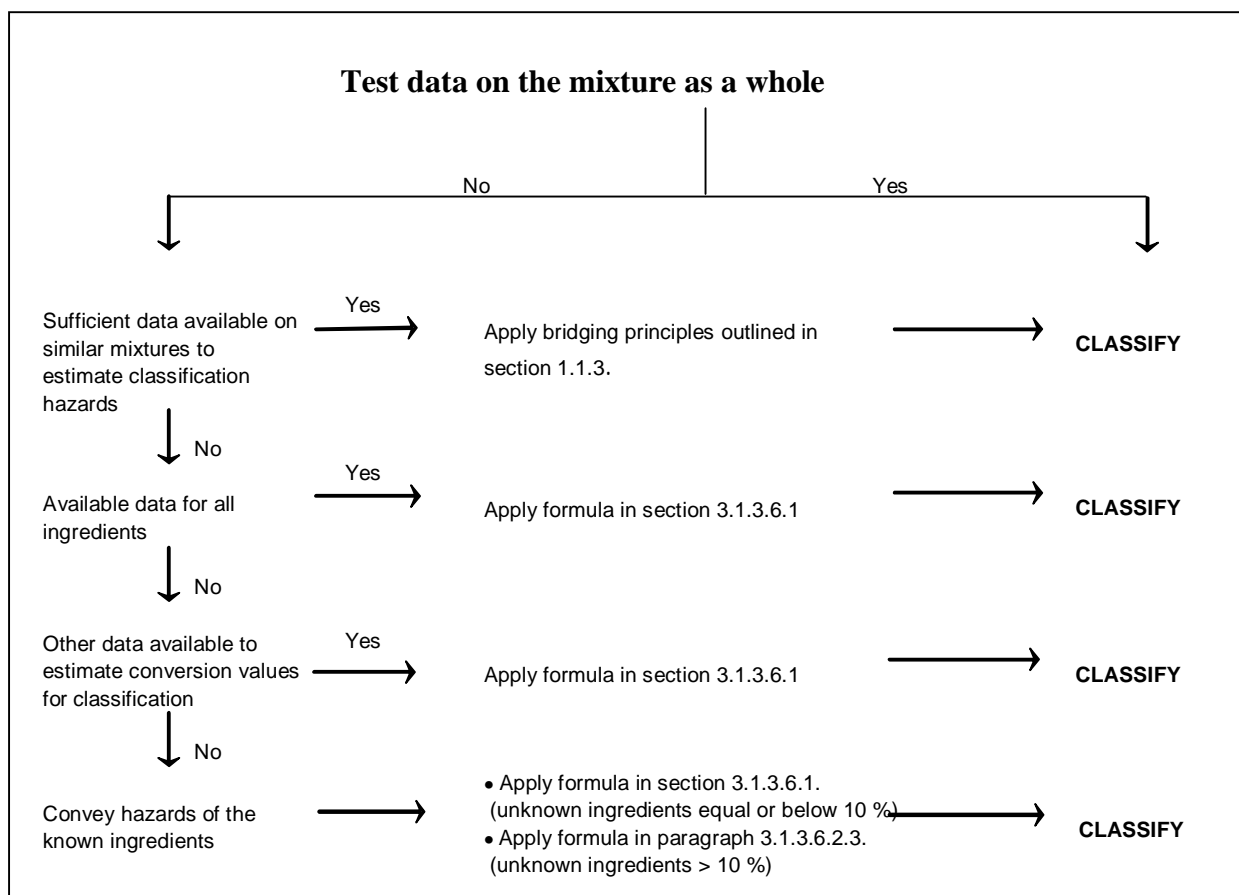
All available information shall be considered. The pictogram and signal word used shall reflect the most severe hazard category and all relevant hazard statements shall be used.

3.1.3.3. In order to make use of all available data for purposes of classifying the hazards of the mixtures, certain assumptions have been made and are applied where appropriate in the tiered approach:

- (a) the "relevant ingredients" of a mixture are those which are present in concentrations of 1 % (w/w for solids, liquids, dusts, mists and vapours and v/v for gases) or greater, unless there is a reason to suspect that an ingredient present at a concentration of less than 1 % is still relevant for classifying the mixture for acute toxicity (see Table 1.1).
- (b) where a classified mixture is used as an ingredient of another mixture, the actual or derived acute toxicity estimate (ATE) for that mixture may be used, when calculating the classification of the new mixture using the formulas in section 3.1.3.6.1 and paragraph 3.1.3.6.2.3.
- (c) If the converted acute toxicity point estimates for all components of a mixture are within the same category, then the mixture should be classified in that category.
- (d) When only range data (or acute toxicity hazard category information) are available for components in a mixture, they may be converted to point estimates in accordance with Table 3.1.2 when calculating the classification of the new mixture using the formulas in 3.1.3.6.1 and 3.1.3.6.2.3.

Figure 3.1.1

Tiered approach to classification of mixtures for acute toxicity



3.1.3.4. Classification of mixtures where acute toxicity data are available for the complete mixture

3.1.3.4.1. Where the mixture itself has been tested to determine its acute toxicity, it shall be classified according to the same criteria as those used for substances, presented in Table 3.1.1. If test data for the mixture are not available, the procedures presented under sections 3.1.3.5 and 3.1.3.6 shall be followed.

3.1.3.5. *Classification of mixtures where acute toxicity data are available for the complete mixture: bridging principles*

3.1.3.5.1. Where the mixture itself has not been tested to determine its acute toxicity, but there are sufficient data on the individual ingredients and similar tested mixtures to adequately characterise the hazards of the mixture, these data shall be used in accordance with the bridging rules set out in section 1.1.3.

3.1.3.5.2. If a tested mixture is diluted with a diluent that has an equivalent or lower toxicity classification than the least toxic original components, and which is not expected to affect the toxicity of other components, then the new diluted mixture may be classified as equivalent to the original tested mixture. Alternatively, the formula explained in 3.1.3.6.1 can be applied

3.1.3.6. *Classification of mixtures based on ingredients of the mixture (Additivity formula)*

3.1.3.6.1. *Data available for all ingredients*

In order to ensure that classification of the mixture is accurate, and that the calculation need only be performed once for all systems, sectors, and categories, the acute toxicity estimate (ATE) of ingredients shall be considered as follows:

- (a) include ingredients with a known acute toxicity, which fall into any of the acute toxicity categories shown in Table 3.1.1;
- (b) ignore ingredients that are presumed not acutely toxic (e.g., water, sugar);
- (c) ignore components if the data available are from a limit dose test (at the upper threshold for Category 4 for the appropriate route of exposure as provided in Table 3.1.1) and do not show acute toxicity.

Components that fall within the scope of this section are considered to be components with a known acute toxicity estimate (ATE). See note (b) to Table 3.1.1 and section 3.1.3.3 for appropriate application of available data to the equation below, and section 3.1.3.6.2.3.

The ATE of the mixture is determined by calculation from the ATE values for all relevant ingredients according to the following formula for Oral, Dermal or Inhalation Toxicity:

$$\frac{100}{ATE_{mix}} = \sum_n \frac{C_i}{ATE_i}$$

where:

C_i = concentration of ingredient i (% w/w or % v/v)

i = the individual ingredient from 1 to n

n = the number of ingredients

ATE_i = Acute Toxicity Estimate of ingredient i.

3.1.3.6.2. *Classification of mixtures when data are not available for all components*

3.1.3.6.2.1. Where an ATE is not available for an individual ingredient of the mixture, but available information, such as that listed below, can provide a derived conversion value such as those laid out in Table 3.1.2, the formula in section 3.1.3.6.1 shall be applied.

This includes evaluation of:

- (a) extrapolation between oral, dermal and inhalation acute toxicity estimates¹. Such an evaluation could require appropriate pharmacodynamic and pharmacokinetic data;
- (b) evidence from human exposure that indicates toxic effects but does not provide lethal dose data;

¹ When mixtures contain ingredients that do not have acute toxicity data for each route of exposure, acute toxicity estimates may be extrapolated from the available data and applied to the appropriate routes (see section 3.1.3.2). However, specific legislation may require testing for a specific route. In those cases, classification shall be performed for that route based upon the legal requirements.

- (c) evidence from any other toxicity tests/assays available on the substance that indicates toxic acute effects but does not necessarily provide lethal dose data; or
- (d) data from closely analogous substances using structure/activity relationships.

This approach generally requires substantial supplemental technical information, and a highly trained and experienced expert (expert judgement, see section 1.1.1), to reliably estimate acute toxicity. If such information is not available, proceed to paragraph 3.1.3.6.2.3.

3.1.3.6.2.2. In the event that a component without any useable information for classification is used in a mixture at a concentration of 1 % or greater, it is concluded that the mixture cannot be attributed a definitive acute toxicity estimate. In this situation the mixture shall be classified based on the known components only, with the additional statement on the label and in the SDS that "x percent of the mixture consists of component(s) of unknown toxicity".

3.1.3.6.2.3. If the total concentration of the ingredient(s) with unknown acute toxicity is $\leq 10\%$ then the formula presented in section 3.1.3.6.1 shall be used. If the total concentration of the ingredient(s) with unknown toxicity is $> 10\%$, the formula presented in section 3.1.3.6.1 shall be corrected to adjust for the total percentage of the unknown ingredient(s) as follows:

$$\frac{100 - \left(\sum C_{\text{unknown}} \text{ if } > 10\% \right)}{ATE_{\text{mix}}} = \sum_n \frac{C_i}{ATE_i}$$

Table 3.1.2

**Conversion from experimentally obtained acute toxicity range values
(or acute toxicity hazard categories) to acute toxicity point
estimates for use in the formulas for the classification of mixtures**

Exposure routes	Classification Category or experimentally obtained acute toxicity range estimate	Converted acute toxicity point estimate (see Note 1)
<u>Oral</u> (mg/kg bodyweight)	0 < Category 1 ≤ 5 5 < Category 2 ≤ 50 50 < Category 3 ≤ 300 300 < Category 4 ≤ 2000	0,5 5 100 500
<u>Dermal</u> (mg/kg bodyweight)	0 < Category 1 ≤ 50 50 < Category 2 ≤ 200 200 < Category 3 ≤ 1000 1000 < Category 4 ≤ 2000	5 50 300 1100
<u>Gases</u> (ppmV)	0 < Category 1 ≤ 100 100 < Category 2 ≤ 500 500 < Category 3 ≤ 2500 2500 < Category 4 ≤ 20000	10 100 700 4500
<u>Vapours</u> (mg/l)	0 < Category 1 ≤ 0,5 0,5 < Category 2 ≤ 2,0 2,0 < Category 3 ≤ 10,0 10,0 < Category 4 ≤ 20,0	0,05 0,5 3 11
<u>Dust/mist</u> (mg/l)	0 < Category 1 ≤ 0,05 0,05 < Category 2 ≤ 0,5 0,5 < Category 3 ≤ 1,0 1,0 < Category 4 ≤ 5,0	0,005 0,05 0,5 1,5





Note 1:

These values are designed to be used in the calculation of the ATE for classification of a mixture based on its components and do not represent test results.

3.1.4. Hazard Communication

3.1.4.1. Label elements shall be used for substances or mixtures meeting the criteria for classification in this hazard class in accordance with Table 3.1.3. Without prejudice to Article 27, combined hazard statements may be used in accordance with Annex III.

Table 3.1.3
Acute toxicity label elements

Classification	Category 1	Category 2	Category 3	Category 4
GHS Pictograms				
Signal Word	Danger	Danger	Danger	Warning
Hazard Statement: - Oral	H300: Fatal if swallowed	H300: Fatal if swallowed	H301: Toxic if swallowed	H302: Harmful if swallowed
- Dermal	H310:Fatal in contact with skin	H310:Fatal in contact with skin	H311: Toxic in contact with skin	H312: Harmful in contact with skin
- Inhalation (see Note 1)	H330:Fatal if inhaled	H330: Fatal if inhaled	H331: Toxic if inhaled	H332: Harmful if inhaled
Precautionary Statement Prevention (oral)	P264 P270	P264 P270	P264 P270	P264 P270
Precautionary Statement Response (oral)	P301 + P310 P321 P330	P301 + P310 P321 P330	P301 + P310 P321 P330	P301 + P312 P330
Precautionary Statement Storage (oral)	P405	P405	P405	
Precautionary Statement Disposal (oral)	P501	P501	P501	P501

Precautionary Statement Prevention (dermal)	P262 P264 P270 P280	P262 P264 P270 P280	P280	P280
Precautionary Statement Response (dermal)	P302 + P350 P310 P322 P361 P363	P302 + P350 P310 P322 P361 P363	P302 + P352 P312 P322 P361 P363	P302 + P352 P312 P322 P363
Precautionary Statement Storage (dermal)	P405	P405	P405	
Precautionary Statement Disposal (dermal)	P501	P501	P501	P501
Precautionary Statement Prevention (inhalation)	P260 P271 P284	P260 P271 P284	P261 P271	P261 P271
Precautionary Statement Response (inhalation)	P304 + P340 P310 P320	P304 + P340 P310 P320	P304 + P340 P311 P321	P304 + P340 P312
Precautionary Statement Storage (inhalation)	P403 + P233 P405	P403 + P233 P405	P403 + P233 P405	
Precautionary Statement Disposal (inhalation)	P501	P501	P501	

Note 1:

In addition to classification for inhalation toxicity, if data are available that indicates that the mechanism of toxicity is corrosivity, the substance or mixture shall also be labelled as EUH071: "corrosive to the respiratory tract" – see advice at 3.1.2.3.3. In addition to an appropriate acute toxicity pictogram, a corrosivity pictogram (used for skin and eye corrosivity) may be added together with the statement "corrosive to the respiratory tract".

Note 2:

In the event that an ingredient without any useable information at all is used in a mixture at a concentration of 1 % or greater, the mixture shall be labelled with the additional statement that "x percent of the mixture consists of ingredient(s) of unknown toxicity" – see advice at 3.1.3.6.2.2.

3.2. SKIN CORROSION/IRRITATION

3.2.1. Definitions

3.2.1.1. Skin Corrosion means the production of irreversible damage to the skin; namely, visible necrosis through the epidermis and into the dermis, following the application of a test substance for up to 4 hours. Corrosive reactions are typified by ulcers, bleeding, bloody scabs, and, by the end of observation at 14 days, by discolouration due to blanching of the skin, complete areas of alopecia, and scars. Histopathology shall be considered to evaluate questionable lesions.

Skin Irritation means the production of reversible damage to the skin following the application of a test substance for up to 4 hours.

3.2.2. Classification criteria for substances

3.2.2.1. Several factors need to be considered in determining the corrosion and irritation potential of substances before testing is undertaken. Solid substances (powders) may become corrosive or irritant when moistened or in contact with moist skin or mucous membranes. Existing human experience and animal data from single or repeated exposure shall be the first line of analysis, as they give information directly relevant to effects on the skin. In vitro alternatives that have been validated and accepted may also be used to help make classification decisions (see Article 5). In some cases enough information may be available from structurally related compounds to make classification decisions.

3.2.2.2. Likewise, pH extremes like • 2 and • 11,5 may indicate the potential to cause skin effects, especially when buffering capacity is known, although the correlation is not perfect. Generally, such substances are expected to produce significant effects on the skin. If consideration of alkali/acid reserve suggests the substance may not be corrosive despite the low or high pH value, then further testing shall be carried out to confirm this, preferably by use of an appropriate validated in vitro test.

3.2.2.3. If a substance is highly toxic by the dermal route, a skin irritation/corrosion study is not practicable since the amount of test substance to be applied considerably exceeds the toxic dose and, consequently, results in the death of the animals. When observations are made of skin irritation/corrosion in acute toxicity studies and are observed up through the limit

dose, additional testing is not needed, provided that the dilutions used and species tested are equivalent.

- 3.2.2.4. All the above information that is available on a substance shall be used in determining the need for in vivo skin irritation testing.

Although information might be gained from the evaluation of single parameters within a tier (see paragraph 3.2.2.5), e.g. caustic alkalis with extreme pH shall be considered as skin corrosives, there is merit in considering the totality of existing information and making an overall weight of evidence determination. This is especially true when there is information available on some but not all parameters. Generally, primary emphasis shall be placed upon existing human experience and data, followed by animal experience and testing data, followed by other sources of information, but case-by-case determinations are necessary.

- 3.2.2.5. A tiered approach to the evaluation of initial information shall be considered, where applicable, recognising that all elements may not be relevant in certain cases.

3.2.2.6. Corrosion

- 3.2.2.6.1. On the basis of the results of animal testing a substance is classified as corrosive, as shown in Table 3.2.1. A corrosive substance is a substance that produces destruction of skin tissue, namely, visible necrosis through the epidermis and into the dermis, in at least 1 tested animal after exposure up to a 4 hour duration. Corrosive reactions are typified by ulcers, bleeding, bloody scabs and, by the end of observation at 14 days, by discoloration due to blanching of the skin, complete areas of alopecia and scars. Histopathology shall be considered to discern questionable lesions.
- 3.2.2.6.2. Three subcategories are provided within the corrosive category: subcategory 1A – where responses are noted following up to 3 minutes exposure and up to 1 hour observation; subcategory 1B – where responses are described following exposure between 3 minutes and 1 hour and observations up to 14 days; and subcategory 1C – where responses occur after exposures between 1 hour and 4 hours and observations up to 14 days.
- 3.2.2.6.3. The use of human data is discussed in paragraphs 3.2.2.1 and 3.2.2.4 and also in paragraphs 1.1.1.3, 1.1.1.4 and 1.1.1.5.

Table 3.2.1
Skin Corrosive category and subcategories

		Corrosive in ≥ 1 of 3 animals	
		Exposure	Observation
Category 1: Corrosive	1A	≤ 3 minutes	≤ 1 hour
	1B	> 3 minutes – ≤ 1 hour	≤ 14 days
	1C	> 1 hour – ≤ 4 hours	≤ 14 days

3.2.2.7. Irritation

3.2.2.7.1. Using the results of animal testing a single irritant category (Category 2) is presented in Table 3.2.2. The use of human data is discussed in paragraphs 3.2.2.1 and 3.2.2.4 and also in paragraphs 1.1.1.3, 1.1.1.4 and 1.1.1.5. The major criterion for the irritant category is that at least 2 of 3 tested animals have a mean score of • 2,3 – • 4,0.

Table 3.2.2
Skin irritation category

Category	Criteria
Category 2: Irritant	<p>(1) Mean value of • 2,3 – • 4,0 for erythema/eschar or for oedema in at least 2 of 3 tested animals from gradings at 24, 48 and 72 hours after patch removal or, if reactions are delayed, from grades on 3 consecutive days after the onset of skin reactions; or</p> <p>(2) Inflammation that persists to the end of the observation period normally 14 days in at least 2 animals, particularly taking into account alopecia (limited area), hyperkeratosis, hyperplasia, and scaling; or</p> <p>(3) In some cases where there is pronounced variability of response among animals, with very definite positive effects related to chemical exposure in a single animal but less than the criteria above.</p>

3.2.2.8. Comments on responses obtained in skin irritation tests in animals

3.2.2.8.1. Animal irritant responses within a test can be quite variable, as they are with corrosion. The major criterion for classification of a substance as irritant to skin, as shown in paragraph 3.2.2.7.1, is the mean value of the scores for either erythema/eschar or oedema calculated in at least 2 of 3 tested animals. A separate irritant criterion accommodates cases when there is a significant irritant response but less than the mean score criterion for a positive test. For example, a test material

might be designated as an irritant if at least 1 of 3 tested animals shows a very elevated mean score throughout the study, including lesions persisting at the end of an observation period of normally 14 days. Other responses could also fulfil this criterion. However, it should be ascertained that the responses are the result of chemical exposure.

- 3.2.2.8.2. Reversibility of skin lesions is another consideration in evaluating irritant responses. When inflammation persists to the end of the observation period in 2 or more test animals, taking into consideration alopecia (limited area), hyperkeratosis, hyperplasia and scaling, then a material shall be considered to be an irritant.

3.2.3. Classification criteria for mixtures

3.2.3.1. *Classification of mixtures when data are available for the complete mixture*

- 3.2.3.1.1. The mixture will be classified using the criteria for substances, and taking into account the testing and evaluation strategies to develop data for these hazard classes.
- 3.2.3.1.2. Unlike other hazard classes, there are alternative tests available for skin corrosivity of certain types of substances and mixtures that can give an accurate result for classification purposes, as well as being simple and relatively inexpensive to perform. When considering testing of the mixture, classifiers are encouraged to use a tiered weight of evidence strategy as included in the criteria for classification of substances for skin corrosion and irritation (paragraph 3.2.2.5), to help ensure an accurate classification as well as avoid unnecessary animal testing. A mixture is considered corrosive to skin (Skin Corrosive Category 1) if it has a pH of 2 or less or a pH of 11,5 or greater. If consideration of alkali/acid reserve suggests the substance or mixture may not be corrosive despite the low or high pH value, then further testing shall be carried out to confirm this, preferably by use of an appropriate validated in vitro test.

3.2.3.2. *Classification of mixtures when data are not available for the complete mixture: bridging principles*

3.2.3.2.1. Where the mixture itself has not been tested to determine its skin irritation/corrosion hazards, but there are sufficient data on the individual ingredients and similar tested mixtures to adequately characterise the hazards of the mixture, these data shall be used in accordance with the bridging rules set out in section 1.1.3.

3.2.3.3. *Classification of mixtures when data are available for all components or only for some components of the mixture*

3.2.3.3.1. In order to make use of all available data for purposes of classifying the skin irritation/corrosion hazards of mixtures, the following assumption has been made and is applied where appropriate in the tiered approach:

Assumption: the "relevant ingredients" of a mixture are those which are present in concentrations of 1 % (w/w for solids, liquids, dusts, mists and vapours and v/v for gases) or greater, unless there is a presumption (e.g., in the case of corrosive ingredients) that an ingredient present at a concentration of less than 1 % can still be relevant for classifying the mixture for skin irritation/corrosion.

3.2.3.3.2. In general, the approach to classification of mixtures as irritant or corrosive to skin when data are available on the components, but not on the mixture as a whole, is based on the theory of additivity, such that each corrosive or irritant component contributes to the overall irritant or corrosive properties of the mixture in proportion to its potency and concentration. A weighting factor of 10 is used for corrosive components when they are present at a concentration below the generic concentration limit for classification with Category 1, but are at a concentration that will contribute to the classification of the mixture as an irritant. The mixture is classified as corrosive or irritant when the sum of the concentrations of such components exceeds a concentration limit.

3.2.3.3.3. Table 3.2.3 provides the generic concentration limits to be used to determine if the mixture is considered to be an irritant or a corrosive to the skin.

- 3.2.3.3.4.1. Particular care must be taken when classifying certain types of mixtures containing substances such as acids and bases, inorganic salts, aldehydes, phenols, and surfactants. The approach explained in paragraphs 3.2.3.3.1 and 3.2.3.3.2 may not be applicable given that many of such substances are corrosive or irritant at concentrations < 1 %.
- 3.2.3.3.4.2. For mixtures containing strong acids or bases the pH shall be used as a classification criterion (see paragraph 3.2.3.1.2) since pH is a better indicator of corrosion than the concentration limits of Table 3.2.3.
- 3.2.3.3.4.3. A mixture containing ingredients that are corrosive or irritant to the skin and that cannot be classified on the basis of the additivity approach (Table 3.2.3), due to chemical characteristics that make this approach unworkable, shall be classified as Skin Corrosive Category 1A, 1B or 1C if it contains ≥ 1 % of an ingredient classified in Category 1A, 1B or 1C respectively or as Category 2 when it contains ≥ 3 % of an irritant ingredient. Classification of mixtures with ingredients for which the approach in Table 3.2.3 does not apply is summarised in Table 3.2.4.
- 3.2.3.3.5. On occasion, reliable data may show that the skin corrosion/irritation hazard of an ingredient will not be evident when present at a level above the generic concentration limits mentioned in Tables 3.2.3 and 3.2.4. In these cases the mixture shall be classified according to that data (see also Articles 10 and 11). On other occasions, when it is expected that the skin corrosion/irritation hazard of an ingredient is not evident when present at a level above the generic concentration limits mentioned in Tables 3.2.3 and 3.2.4, testing of the mixture shall be considered. In those cases the tiered weight of evidence strategy shall be applied, as described in paragraph 3.2.2.5.
- 3.2.3.3.6. If there are data showing that (an) ingredient(s) is/are corrosive or irritant at a concentration of < 1 % (corrosive) or < 3 % (irritant), the mixture shall be classified accordingly.

Table 3.2.3

**Generic concentration limits of ingredients
classified for skin corrosive/irritant hazard (Category 1 or 2)
that trigger classification of the mixture as corrosive/irritant to skin**

Sum of ingredients classified as:	Concentration triggering classification of a mixture as:	
	Skin Corrosive	Skin Irritant
	Category 1 (see note below)	Category 2
Skin Corrosive Categories 1A, 1B, 1C	$\geq 5 \%$	$\geq 1 \%$ but $< 5 \%$
Skin irritant Category 2		$\geq 10 \%$
(10 x Skin Corrosive Category 1A, 1B, 1C) + Skin irritant Category 2		$\geq 10 \%$

Note:

The sum of all ingredients of a mixture classified as Skin Corrosive Category 1A, 1B or 1C respectively, shall each be $\geq 5 \%$ respectively in order to classify the mixture as either Skin Corrosive Category 1A, 1B or 1C. If the sum of the Skin Corrosive Category 1A ingredients is $< 5 \%$ but the sum of Category 1A+1B ingredients is $\geq 5 \%$, the mixture shall be classified as Skin Corrosive Category 1B. Similarly, if the sum of Skin Corrosive Category 1A+1B ingredients is $< 5 \%$ but the sum of Category 1A+1B+1C ingredients is $\geq 5 \%$ the mixture shall be classified as Skin Corrosive Category 1C.

Table 3.2.4



Generic concentration limits of ingredients of a mixture for which the additivity approach does not apply, that trigger classification of the mixture as corrosive/irritant to skin

Ingredient:	Concentration:	Mixture classified as: Skin
Acid with $\text{pH} \leq 2$	$\geq 1 \%$	Category 1
Base with $\text{pH} \geq 11,5$	$\geq 1 \%$	Category 1
Other corrosive (Categories 1A, 1B, 1C) ingredients for which additivity does not apply	$\geq 1 \%$	Category 1
Other irritant (Category 2) ingredients for which additivity does not apply, including acids and bases	$\geq 3 \%$	Category 2

3.2.4. Hazard Communication

3.2.4.1. Label elements shall be used for substances or mixtures meeting the criteria for classification in this hazard class in accordance with Table 3.2.5.

Table 3.2.5
Label elements for skin corrosion/irritation

Classification	Category 1 A/1 B/1 C	Category 2
GHS Pictograms		
Signal Word	Danger	Warning
Hazard Statement	H314: Causes severe skin burns and eye damage	H315: Causes skin irritation
Precautionary Statement Prevention	P260 P264 P280	P264 P280
Precautionary Statement Response	P301 + P330 + P331 P303 + P361 + P353 P363 P304 + P340 P310 P321 P305 + P351 + P338	P302 + P352 P321 P332 + P313 P362
Precautionary Statement Storage	P405	
Precautionary Statement Disposal	P501	

3.3. SERIOUS EYE DAMAGE/EYE IRRITATION

3.3.1. Definitions

3.3.1.1. Serious eye damage means the production of tissue damage in the eye, or serious physical decay of vision, following application of a test substance to the anterior surface of the eye, which is not fully reversible within 21 days of application.

Eye irritation means the production of changes in the eye following the application of test substance to the anterior surface of the eye, which are fully reversible within 21 days of application.

3.3.2. Classification criteria for substances

3.3.2.1. The classification system for substances involves a tiered testing and evaluation scheme, combining pre-existing information on serious ocular tissue damage and on eye irritation

(including data relating to historical human or animal experience) as well as considerations on (Q)SAR and the output of validated in vitro tests in order to avoid unnecessary animal testing.

- 3.3.2.2. Before any in vivo testing for serious eye damage/eye irritation is carried out, all existing information on a substance shall be reviewed. Preliminary decisions can often be made from existing data as to whether a substance causes serious (i.e. irreversible) damage to the eyes. If a substance can be classified on the basis of these data, no testing is required.
- 3.3.2.3. Several factors need to be considered in determining the serious eye damage or irritation potential of a substance before testing is undertaken. Accumulated human and animal experience shall be the first line of analysis, as it gives information directly relevant to effects on the eye. In some cases enough information may be available from structurally related compounds to make hazard decisions. Likewise, pH extremes like ≤ 2 and $\geq 11,5$ may produce serious eye damage, especially when associated with significant buffering capacity. Such substances are expected to produce significant effects on the eyes. Possible skin corrosion has to be evaluated prior to consideration of serious eye damage/eye irritation in order to avoid testing for local effects on eyes with skin corrosive substances. Skin corrosive substances shall be considered as leading to serious damage to the eyes as well (Category 1), while skin irritant substances may be considered as leading to eye irritation (Category 2). In vitro alternatives that have been validated and accepted can be used to make classification decisions (see Article 5).
- 3.3.2.4. All the above information that is available on a substance shall be used in determining the need for in vivo eye irritation testing. Although information may be gained from the evaluation of single parameters within a tier (e.g. caustic alkalis with extreme pH shall be considered as local corrosives), the totality of existing information shall be considered in making an overall weight of evidence determination, particularly when there is information available on some but not all parameters. Generally, primary emphasis shall be placed upon expert judgement, considering human experience with the substance, followed by the outcome of skin irritation testing and of well-validated alternative methods. Animal testing with corrosive substances or mixtures shall be avoided whenever possible.
- 3.3.2.5. A tiered approach to the evaluation of initial information shall be considered where applicable, while recognising that all elements may not be relevant in certain cases.

3.3.2.6. *Irreversible effects on the eye/serious damage to eyes (Category 1)*

3.3.2.6.1. Substances that have the potential to seriously damage the eyes are classified in Category 1 (irreversible effects on the eye). Substances are classified in this hazard category on the basis of the results of animal testing, in accordance with the criteria listed in Table 3.3.1. These observations include animals with grade 4 cornea lesions and other severe reactions (e.g., destruction of cornea) observed at any time during the test, as well as persistent corneal opacity, discoloration of the cornea by a dye substance, adhesion, pannus, and interference with the function of the iris or other effects that impair sight. In this context, persistent lesions are considered those which are not fully reversible within an observation period of normally 21 days. Substances are also classified in Category 1 if they fulfil the criteria of corneal opacity ≥ 3 or iritis $> 1,5$ detected in a Draize eye test with rabbits, recognising that such severe lesions usually do not reverse within a 21-day observation period.

Table 3.3.1
Category for irreversible eye effects

Category	Criteria
Irreversible effects on the eye (Category 1)	If, when applied to the eye of an animal, a substance produces: <ul style="list-style-type: none">– at least in one animal effects on the cornea, iris or conjunctiva that are not expected to reverse or have not fully reversed within an observation period of normally 21 days; and/or– at least in 2 of 3 tested animals, a positive response of:<ul style="list-style-type: none">– corneal opacity ≥ 3 and/or– iritis $> 1,5$ calculated as the mean scores following grading at 24, 48 and 72 hours after installation of the test material.

3.3.2.6.2. The use of human data is discussed in paragraphs 3.3.2.1, 3.3.2.4, and also in paragraphs 1.1.1.3, 1.1.1.4 and 1.1.1.5.

3.3.2.7. *Reversible effects on the eye (Category 2)*

3.3.2.7.1. Substances that have the potential to induce reversible eye irritation are classified in Category 2 (irritating to eyes).

Table 3.3.2
Category for reversible eye effects

Category	Criteria
Irritating to eyes (Category 2)	if, when applied to the eye of an animal, a substance produces: <ul style="list-style-type: none"> – at least in 2 of 3 tested animals, a positive response of: <ul style="list-style-type: none"> • corneal opacity ≥ 1 and/or • iritis ≥ 1, and/or • conjunctival redness ≥ 2 and/or • conjunctival oedema (chemosis) ≥ 2 – calculated as the mean scores following grading at 24, 48 and 72 hours after installation of the test material, and which fully reverses within an observation period of 21 days

3.3.2.7.2. For those substances where there is pronounced variability among animal responses, this information shall be taken into account in determining the classification.

3.3.3. Classification criteria for mixtures

3.3.3.1. *Classification of mixtures when data are available for the complete mixture*

3.3.3.1.1. The mixture will be classified using the criteria for substances, and taking into account the testing and evaluation strategies used to develop data for these hazard classes.

3.3.3.1.2. Unlike other hazard classes, there are alternative tests available for skin corrosivity of certain types of mixtures that give an accurate result for classification purposes, as well as being simple and relatively inexpensive to perform. When considering testing of the mixture classifiers are encouraged to use a tiered weight of evidence strategy as included in the criteria for classification of substances for skin corrosion and

serious eye damage and eye irritation to help ensure an accurate classification, as well as avoid unnecessary animal testing. A mixture is considered to cause serious eye damage (Category 1) if it has a pH $\leq 2,0$ or $\geq 11,5$. If consideration of alkali/acid reserve suggests the mixture may not have the potential to cause serious eye damage despite the low or high pH value, then further testing needs to be carried out to confirm this, preferably by use of an appropriate validated in vitro test.

3.3.3.2. *Classification of mixtures when data are not available for the complete mixture: bridging principles*

3.3.3.2.1. Where the mixture itself has not been tested to determine its skin corrosivity or potential to cause serious eye damage or irritation, but there are sufficient data on the individual ingredients and similar tested mixtures to adequately characterise the hazards of the mixture, these data shall be used in accordance with the bridging rules set out in section 1.1.3.

3.3.3.3. *Classification of mixtures when data are available for all components or only for some components of the mixture*

3.3.3.3.1. In order to make use of all available data for purposes of classifying the eye irritation/serious eye damaging properties of the mixtures, the following assumption has been made and is applied where appropriate in the tiered approach:

Assumption: The "relevant ingredients" of a mixture are those which are present in concentrations of 1 % (w/w for solids, liquids, dusts, mists and vapours and v/v for gases) or greater, unless there is a presumption (e.g. in the case of corrosive ingredients) that an ingredient present at a concentration of less than 1 % is still relevant for classifying the mixture for eye irritation/serious eye damage.

3.3.3.3.2. In general, the approach to classification of mixtures as eye irritant or seriously damaging to the eye when data are available on the components, but not on the mixture as a whole, is based on the theory of additivity, such that each corrosive or irritant component contributes to the overall irritant or corrosive properties of the mixture in proportion to its potency and concentration. A weighting factor of 10 is used for corrosive components when they are present at a concentration below the generic concentration limit for classification in Category 1, but are at a concentration

that will contribute to the classification of the mixture as an irritant. The mixture is classified as seriously damaging to the eye or eye irritant when the sum of the concentrations of such components exceeds a concentration limit.

- 3.3.3.3.3. Table 3.3.3 provides the generic concentration limits to be used to determine if the mixture shall be classified as irritant or as seriously damaging to the eye.
- 3.3.3.3.4.1. Particular care must be taken when classifying certain types of mixtures containing substances such as acids and bases, inorganic salts, aldehydes, phenols, and surfactants. The approach explained in paragraphs 3.3.3.3.1 and 3.3.3.3.2 might not work given that many of such substances are corrosive or irritant at concentrations < 1 %.
- 3.3.3.3.4.2. For mixtures containing strong acids or bases the pH shall be used as classification criteria (see paragraph 3.3.2.3) since pH will be a better indicator of serious eye damage than the generic concentration limits of Table 3.3.3.
- 3.3.3.3.4.3. A mixture containing corrosive or irritant ingredients that cannot be classified based on the additivity approach (Table 3.3.3), due to chemical characteristics that make this approach unworkable, shall be classified as Category 1 for effects on the eye if it contains ≥ 1 % of a corrosive ingredient and as Category 2 when it contains ≥ 3 % of an irritant ingredient. Classification of mixtures with ingredients for which the approach in Table 3.3.3 does not apply is summarised in Table 3.3.4.
- 3.3.3.3.5. On occasion, reliable data may show that the reversible/irreversible eye effects of an ingredient will not be evident when present at a level above the generic concentration limits mentioned in Tables 3.3.3 and 3.3.4. In these cases the mixture shall be classified according to those data. On other occasions, when it is expected that the skin corrosion/irritation hazards or the reversible/irreversible eye effects of an ingredient will not be evident when present at a level above the generic concentration limits mentioned in Tables 3.3.3 and 3.3.4, testing of the mixture shall be considered. In those cases, the tiered weight of evidence strategy shall be applied.
- 3.3.3.3.6. If there are data showing that (an) ingredient(s) may be corrosive or irritant at a concentration of < 1 % (corrosive) or < 3 % (irritant), the mixture shall be classified accordingly.

Table 3.3.3

Generic concentration limits of ingredients of a mixture classified as Skin corrosive Category 1 and/or eye Category 1 or 2 for effects on the eye that trigger classification of the mixture for effects on the eye (Category 1 or 2)

Sum of ingredients classified as:	Concentration triggering classification of a mixture as:	
	Irreversible Eye Effects	Reversible Eye Effects
	Category 1	Category 2
Eye Effects Category 1 or Skin Corrosive Category 1A, 1B, 1C	≥ 3 %	≥ 1 % but < 3 %
Eye Effects Category 2		≥ 10 %
(10 x Eye Effects Category 1) + Eye effects Category 2		≥ 10 %
Skin Corrosive Category 1A, 1B, 1C + Eye effects Category 1	≥ 3 %	≥ 1 % but < 3 %
10 x (Skin Corrosive Category 1A, 1B, 1C + Eye Effects Category 1) + Eye Effects Category 2		≥ 10 %



Table 3.3.4
Generic concentration limits of ingredients of a mixture
for which the additivity approach does not apply, that trigger
classification of the mixture as hazardous to the eye

Ingredient	Concentration	Mixture classified as: Eye
Acid with pH ≤ 2	≥ 1 %	Category 1
Base with pH ≥ 11,5	≥ 1 %	Category 1
Other corrosive (Category 1) ingredients for which additivity does not apply	≥ 1 %	Category 1
Other irritant (Category 2) ingredients for which additivity does not apply, including acids and bases	≥ 3 %	Category 2

3.3.4. Hazard Communication

3.3.4.1. Label elements shall be used for substances or mixtures meeting the criteria for classification in this hazard class in accordance with Table 3.3.5.

Table 3.3.5
Label elements for serious eye damage/eye irritation

Classification	Category 1	Category 2
GHS Pictograms		
Signal Word	Danger	Warning
Hazard Statement	H318: Causes serious eye damage	H319: Causes serious eye irritation
Precautionary Statement Prevention	P280	P264 P280
Precautionary Statement Response	P305 + P351 + P338 P310	P305 + P351 + P338 P337 + P313
Precautionary Statement Storage		
Precautionary Statement Disposal		

3.4. RESPIRATORY OR SKIN SENSITISATION

3.4.1. Definitions and general considerations

3.4.1.1. Respiratory sensitiser means a substance that will lead to hypersensitivity of the airways following inhalation of the substance.

3.4.1.2. Skin sensitiser means a substance that will lead to an allergic response following skin contact.

3.4.1.3. For the purpose of section 3.4, sensitisation includes two phases: the first phase is induction of specialised immunological memory in an individual by exposure to an allergen. The second phase is elicitation, i.e. production of a cell-mediated or antibody-mediated allergic response by exposure of a sensitised individual to an allergen.

3.4.1.4. For respiratory sensitisation, the pattern of induction followed by elicitation phases is shared in common with skin sensitisation. For skin sensitisation, an induction phase is required in which the immune system learns to react; clinical symptoms can then arise

when subsequent exposure is sufficient to elicit a visible skin reaction (elicitation phase). As a consequence, predictive tests usually follow this pattern in which there is an induction phase, the response to which is measured by a standardised elicitation phase, typically involving a patch test. The local lymph node assay is the exception, directly measuring the induction response. Evidence of skin sensitisation in humans normally is assessed by a diagnostic patch test.

3.4.1.5. Usually, for both skin and respiratory sensitisation, lower levels are necessary for elicitation than are required for induction. Provisions for alerting sensitised individuals to the presence of a particular sensitiser in a mixture can be found in Annex II, section 2.8.

3.4.1.6. The hazard class Respiratory or Skin Sensitisation is differentiated into:

- Respiratory Sensitisation and
- Skin Sensitisation.

3.4.2. Classification criteria for substances

3.4.2.1. Respiratory sensitisers

3.4.2.1.1 Hazard categories

3.4.2.1.1.1 Respiratory sensitizers shall be classified in Category 1 where data are not sufficient for sub-categorisation.

3.4.2.1.1.2 Where data are sufficient a refined evaluation according to 3.4.2.1.1.3 allows the allocation of respiratory sensitizers into sub-category 1A, strong sensitizers, or sub-category 1B for other respiratory sensitizers.

3.4.2.1.1.3 Effects seen in either humans or animals will normally justify classification in a weight of evidence approach for respiratory sensitizers. Substances may be allocated to one of the two sub-categories 1A or 1B using a weight of evidence approach in accordance with the criteria given in Table 3.4.1 and on the basis of reliable and good quality evidence from human cases or epidemiological studies and/or observations from appropriate studies in experimental animals.

3.4.2.1.1.4 Substances shall be classified as respiratory sensitisers in accordance with the criteria in Table 3.4.1:

Table 3.4.1
Hazard category and sub-categories for respiratory sensitisers

Category	Criteria
Category 1	Substances shall be classified as respiratory sensitisers (Category 1) where data are not sufficient for sub-categorisation in accordance with the following criteria: (a) if there is evidence in humans that the substance can lead to specific respiratory hypersensitivity and/or (b) if there are positive results from an appropriate animal test.
Sub-category 1A:	Substances showing a high frequency of occurrence in humans; or a probability of occurrence of a high sensitisation rate in humans based on animal or other tests ¹ . Severity of reaction may also be considered.
Sub-category 1B:	Substances showing a low to moderate frequency of occurrence in humans; or a probability of occurrence of a low to moderate sensitisation rate in humans based on animal or other tests ¹ . Severity of reaction may also be considered.

3.4.2.1.2. *Human evidence*

3.4.2.1.2.1. Evidence that a substance can lead to specific respiratory hypersensitivity will normally be based on human experience. In this context, hypersensitivity is normally seen as asthma, but other hypersensitivity reactions such as rhinitis/conjunctivitis and alveolitis are also considered. The condition will have the clinical character of an allergic reaction. However, immunological mechanisms do not have to be demonstrated.

3.4.2.1.2.2. When considering the human evidence, it is necessary for a decision on classification to take into account, in addition to the evidence from the cases:

¹ At present, recognised and validated animal models for the testing of respiratory hypersensitivity are not available. Under certain circumstances, data from animal studies may provide valuable information in a weight of evidence assessment.

- (a) the size of the population exposed;
- (b) the extent of exposure.

The use of human data is discussed in paragraphs 1.1.1.3, 1.1.1.4 and 1.1.1.5.

3.4.2.1.2.3. The evidence referred to above could be

- (a) clinical history and data from appropriate lung function tests related to exposure to the substance, confirmed by other supportive evidence which may include:
 - (i) in vivo immunological test (e.g. skin prick test);
 - (ii) in vitro immunological test (e.g. serological analysis);
 - (iii) studies that indicate other specific hypersensitivity reactions where immunological mechanisms of action have not been proven, e.g. repeated low-level irritation, pharmacologically mediated effects;
 - (iv) a chemical structure related to substances known to cause respiratory hypersensitivity;
- (b) data from one or more positive bronchial challenge tests with the substance conducted according to accepted guidelines for the determination of a specific hypersensitivity reaction.

3.4.2.1.2.4. Clinical history shall include both medical and occupational history to determine a relationship between exposure to a specific substance and development of respiratory hypersensitivity. Relevant information includes aggravating factors both in the home and workplace, the onset and progress of the disease, family history and medical history of the patient in question. The medical history shall also include a note of other allergic or airway disorders from childhood, and smoking history.

3.4.2.1.2.5. The results of positive bronchial challenge tests are considered to provide sufficient evidence for classification on their own. It is however recognised that in practice many of the examinations listed above will already have been carried out.

3.4.2.1.3. *Animal studies*

3.4.2.1.3.1. Data from appropriate animal studies¹ which may be indicative of the potential of a substance to cause sensitisation by inhalation in humans² may include:

- (a) measurements of Immunoglobulin E (IgE) and other specific immunological parameters in mice;
- (b) specific pulmonary responses in guinea pigs.

3.4.2.2. *Skin sensitisers*

3.4.2.2.1. Hazard categories

3.4.2.2.1.1 Skin sensitisers shall be classified in Category 1 where data are not sufficient for sub-categorisation.

3.4.2.2.1.2 Where data are sufficient a refined evaluation according to section 3.4.2.2.1.3 allows the allocation of skin sensitisers into sub-category 1A, strong sensitisers, or sub-category 1B for other skin sensitisers.

3.4.2.2.1.3 Effects seen in either humans or animals will normally justify classification in a weight of evidence approach for skin sensitisers as described in section 3.4.2.2.2. Substances may be allocated to one of the two sub-categories 1A or 1B using a weight of evidence approach in accordance with the criteria given in Table 3.4.2 and on the basis of reliable and good quality evidence from human cases or epidemiological studies and/or observations from appropriate studies in experimental animals according to the guidance values provided in sections 3.4.2.2.2.1 and 3.4.2.2.3.2 for sub-category 1A and in sections 3.4.2.2.2.2 and 3.4.2.2.3.3 for sub-category 1B.

¹ At present, recognised and validated animal models for the testing of respiratory hypersensitivity are not available. Under certain circumstances, data from animal studies may provide valuable information in a weight of evidence assessment.

² The mechanisms by which substances induce symptoms of asthma are not yet fully known. For preventative measures, these substances are considered respiratory sensitisers. However, if on the basis of the evidence, it can be demonstrated that these substances induce symptoms of asthma by irritation only in people with bronchial hyper reactivity, they should not be considered as respiratory sensitisers.

3.4.2.2.1.4 Substances shall be classified as skin sensitisers in accordance with the criteria in Table 3.4.2:

Table 3.4.2
Hazard category and sub-categories for skin sensitisers

Category	Criteria
Category 1	<p>Substances shall be classified as skin sensitisers (Category 1) where data are not sufficient for sub-categorisation in accordance with the following criteria:</p> <p>(a) if there is evidence in humans that the substance can lead to sensitisation by skin contact in a substantial number of persons, or</p> <p>(b) if there are positive results from an appropriate animal test (see specific criteria in section 3.4.2.2.4.1).</p>
Sub-category 1A:	<p>Substances showing a high frequency of occurrence in humans and/or a high potency in animals can be presumed to have the potential to produce significant sensitisation in humans. Severity of reaction may also be considered.</p>
Sub-category 1B:	<p>Substances showing a low to moderate frequency of occurrence in humans and/or a low to moderate potency in animals can be presumed to have the potential to produce sensitisation in humans. Severity of reaction may also be considered.</p>

3.4.2.2.2. *Human evidence*

3.4.2.2.2.1 Human evidence for sub-category 1A can include:

- (a) positive responses at • 500 µg/cm² (HRIPT, HMT – induction threshold);
- (b) diagnostic patch test data where there is a relatively high and substantial incidence of reactions in a defined population in relation to relatively low exposure;
- (c) other epidemiological evidence where there is a relatively high and substantial incidence of allergic contact dermatitis in relation to relatively low exposure.

3.4.2.2.2.2 Human evidence for sub-category 1B can include:

- (a) positive responses at > 500 µg/cm² (HRIPT, HMT – induction threshold);
- (b) diagnostic patch test data where there is a relatively low but substantial incidence of reactions in a defined population in relation to relatively high exposure;
- (c) other epidemiological evidence where there is a relatively low but substantial incidence of allergic contact dermatitis in relation to relatively high exposure.

The use of human data is discussed in sections 1.1.1.3, 1.1.1.4 and 1.1.1.5.

3.4.2.2.3. *Animal studies*

3.4.2.2.3.1 For Category 1, when an adjuvant type test method for skin sensitisation is used, a response of at least 30% of the animals is considered as positive. For a non-adjuvant Guinea pig test method a response of at least 15% of the animals is considered positive. For Category 1, a stimulation index of three or more is considered a positive response in the local lymph node assay. Test methods for skin sensitisation are described in the OECD Guideline 406 (the Guinea Pig Maximisation test and the Buehler guinea pig test) and Guideline 429 (Local Lymph Node Assay). Other methods may be used provided that they are well-validated and scientific justification is given. For example, the Mouse Ear Swelling Test (MEST) could be a reliable screening test to detect moderate to strong sensitisers, and could be used as a first stage in the assessment of skin sensitisation potential.

3.4.2.2.3.2 Animal test results for sub-category 1A can include data with values indicated in Table 3.4.3

Table 3.4.3

Animal test results for sub-category 1A

Assay	Criteria
Local lymph node assay	EC3 value \leq 2%
Guinea pig maximisation test	\geq 30% responding at \leq 0,1% intradermal induction dose <u>or</u> \geq 60% responding at $>$ 0,1% to \leq 1% intradermal induction dose
Buehler assay	\geq 15% responding at \leq 0,2% topical induction dose <u>or</u> \geq 60% responding at $>$ 0,2% to \leq 20% topical induction dose

3.4.2.2.3.3 Animal test results for sub-category 1B can include data with values indicated in Table 3.4.4 below:

Table 3.4.4

Animal test results for sub-category 1B

Assay	Criteria
Local lymph node assay	EC3 value $>$ 2%
Guinea pig maximisation test	\geq 30% to $<$ 60% responding at $>$ 0,1% to \leq 1% intradermal induction dose <u>or</u> \geq 30% responding at $>$ 1% intradermal induction dose
Buehler assay	\geq 15% to $<$ 60% responding at $>$ 0,2% to \bullet 20% topical induction dose <u>or</u> \geq 15% responding at $>$ 20% topical induction dose

3.4.2.2.4 *Specific considerations*

3.4.2.2.4.1 For classification of a substance, evidence should include any or all of the following using a weight of evidence approach:

- (a) Positive data from patch testing, normally obtained in more than one dermatology clinic;
- (b) Epidemiological studies showing allergic contact dermatitis caused by the substance. Situations in which a high proportion of those exposed exhibit characteristic symptoms are to be looked at with special concern, even if the number of cases is small;
- (c) Positive data from appropriate animal studies;
- (d) Positive data from experimental studies in man (section 1.3.2.4.7);
- (e) Well documented episodes of allergic contact dermatitis, normally obtained in more than one dermatology clinic;
- (f) Severity of reaction may also be considered.

3.4.2.2.4.2 Evidence from animal studies is usually much more reliable than evidence from human exposure. However, in cases where evidence is available from both sources, and there is conflict between the results, the quality and reliability of the evidence from both sources must be assessed in order to resolve the question of classification on a case-by-case basis. Normally, human data are not generated in controlled experiments with volunteers for the purpose of hazard classification but rather as part of risk assessment to confirm lack of effects seen in animal tests. Consequently, positive human data on skin sensitisation are usually derived from case-control or other, less defined studies. Evaluation of human data must therefore be carried out with caution as the frequency of cases reflect, in addition to the inherent properties of the substances, factors such as the exposure situation, bioavailability, individual predisposition and preventive measures taken. Negative human data should not normally be used to negate positive results from animal studies. For both animal and human data, consideration should be given to the impact of vehicle.

3.4.2.2.4.3 If none of the above mentioned conditions are met, the substance need not be classified as a skin sensitiser. However, a combination of two or more indicators of skin sensitisation as listed below may alter the decision. This shall be considered on a case-by-case basis.

- (a) Isolated episodes of allergic contact dermatitis;
- (b) Epidemiological studies of limited power, e.g. where chance, bias or confounders have not been ruled out fully with reasonable confidence;
- (c) Data from animal tests, performed according to existing guidelines, which do not meet the criteria for a positive result described in section 3.4.2.2.3, but which are sufficiently close to the limit to be considered significant;
- (d) Positive data from non-standard methods;
- (e) Positive results from close structural analogues.

3.4.2.2.4.4 *Immunological contact urticaria*

Substances meeting the criteria for classification as respiratory sensitisers may in addition cause immunological contact urticaria. Consideration should be given to classifying these substances also as skin sensitisers. Substances which cause immunological contact urticaria without meeting the criteria for respiratory sensitisers should also be considered for classification as skin sensitisers.

There is no recognised animal model available to identify substances which cause immunological contact urticaria. Therefore, classification will normally be based on human evidence which will be similar to that for skin sensitisation.

3.4.3. Classification criteria for mixtures

3.4.3.1. *Classification of mixtures when data are available for the complete mixture*

3.4.3.1.1. When reliable and good quality evidence from human experience or appropriate studies in experimental animals, as described in the criteria for substances, is available for the mixture, then the mixture can be classified by weight of evidence evaluation of these data. Care shall be exercised in evaluating data on mixtures, that the dose used does not render the results inconclusive.

3.4.3.2. *Classification of mixtures when data are not available for the complete mixture: bridging principles*

3.4.3.2.1. Where the mixture itself has not been tested to determine its sensitising properties, but there are sufficient data on the individual ingredients and similar tested mixtures

to adequately characterise the hazards of the mixture, these data shall be used in accordance with the bridging rules set out in section 1.1.3.

- 3.4.3.3.1. The mixture shall be classified as a respiratory or skin sensitiser when at least one ingredient has been classified as a respiratory or skin sensitiser and is present at or above the appropriate generic concentration limit as shown in Table 3.4.5 for solid/liquid and gas respectively.
- 3.4.3.3.2. Some substances that are classified as sensitisers may elicit a response, when present in a mixture in quantities below the concentrations established in Table 3.4.5, in individuals who are already sensitised to the substance or mixture (see Note 1 to Table 3.4.6).

Table 3.4.5

Generic concentration limits of components of a mixture classified as either respiratory sensitisers or skin sensitisers that trigger classification of the mixture

Component classified as:	Generic concentration limits triggering classification of a mixture as:		
	Respiratory sensitiser Category 1		Skin sensitiser Category 1
	Solid/Liquid	Gas	All physical states
Respiratory sensitiser Category 1	≥ 1,0 %	≥ 0,2%	
Respiratory sensitiser Sub-category 1A	≥ 0,1%	≥ 0,1%	
Respiratory sensitiser Sub-category 1B	≥ 1,0%	≥ 0,2%	
Skin sensitiser Category 1			≥ 1,0%
Skin sensitiser Sub-category 1A			≥ 0,1%
Skin sensitiser Sub-category 1B			≥ 1,0%

Table 3.4.6**Concentration limits for elicitation of components of a mixture**



Component classified as:	Concentration limits for elicitation		
	Respiratory sensitiser Category 1		Skin sensitiser Category 1
	Solid/Liquid	Gas	All physical states
Respiratory sensitiser Category 1	≥ 0,1% (Note 1)	≥ 0,1% (Note 1)	
Respiratory sensitiser Sub-category 1A	≥ 0,01% (Note 1)	≥ 0,01% (Note 1)	
Respiratory sensitiser Sub-category 1B	≥ 0,1% (Note 1)	≥ 0,1% (Note 1)	
Skin sensitiser Category 1			≥ 0,1% (Note 1)
Skin sensitiser Sub-category 1A			≥ 0,01% (Note 1)
Skin sensitiser Sub-category 1B			≥ 0,01% (Note 1)

Note 1: This concentration limit for elicitation is used for the application of the special labelling requirements of Annex II section 2.8 to protect already sensitised individuals. A SDS is required for the mixture containing a component above this concentration. For sensitising substances with specific concentration limit lower than 0,1%, the concentration limit for elicitation should be set at one tenth of the specific concentration limit.

3.4.4. Hazard communication

3.4.4.1. Label elements shall be used for substances or mixtures meeting the criteria for classification in this hazard class in accordance with Table 3.4.7.

Table 3.4.7
Respiratory or skin sensitisation label elements

Classification	Respiratory sensitisation	Skin sensitisation
	Category 1 and sub-categories 1A and 1B	Category 1 and sub-categories 1A and 1B
GHS Pictograms		
Signal Word	Danger	Warning
Hazard Statement	H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled	H317: May cause an allergic skin reaction
Precautionary Statement Prevention	P261 P285	P261 P272 P280
Precautionary Statement Response	P304 + P341 P342+ P311	P302 + P352 P333 + P313 P321 P363
Precautionary Statement Storage		
Precautionary Statement Disposal	P501	P501

3.5. GERM CELL MUTAGENICITY

3.5.1. Definitions and general considerations

3.5.1.1. A mutation means a permanent change in the amount or structure of the genetic material in a cell. The term "mutation" applies both to heritable genetic changes that may be manifested at the phenotypic level and to the underlying DNA modifications when known (including specific base pair changes and chromosomal translocations). The term "mutagenic" and "mutagen" will be used for agents giving rise to an increased occurrence of mutations in populations of cells and/or organisms.

3.5.1.2. The more general terms "genotoxic" and "genotoxicity" apply to agents or processes which alter the structure, information content, or segregation of DNA, including those which cause DNA damage by interfering with normal replication processes, or which in a non-physiological manner (temporarily) alter its replication. Genotoxicity test results are usually taken as indicators for mutagenic effects.

3.5.2. Classification criteria for substances

3.5.2.1. This hazard class is primarily concerned with substances that may cause mutations in the germ cells of humans that can be transmitted to the progeny. However, the results from mutagenicity or genotoxicity tests in vitro and in mammalian somatic and germ cells in vivo are also considered in classifying substances and mixtures within this hazard class.

3.5.2.2. For the purpose of classification for germ cell mutagenicity, substances are allocated to one of two categories as shown in Table 3.5.1.

Table 3.5.1**Hazard categories for germ cell mutagens**

Categories	Criteria
CATEGORY 1:	Substances known to induce heritable mutations or to be regarded as if they induce heritable mutations in the germ cells of humans. Substances known to induce heritable mutations in the germ cells of humans.
Category 1A:	The classification in Category 1A is based on positive evidence from human epidemiological studies.
Category 1B:	Substances to be regarded as if they induce heritable mutations in the germ cells of humans. The classification in Category 1B is based on: <ul style="list-style-type: none">– positive result(s) from in vivo heritable germ cell mutagenicity tests in mammals; or– positive result(s) from in vivo somatic cell mutagenicity tests in mammals, in combination with some evidence that the substance has potential to cause mutations to germ cells. It is possible to derive this supporting evidence from mutagenicity/genotoxicity tests in germ cells in vivo, or by demonstrating the ability of the substance or its metabolite(s) to interact with the genetic material of germ cells; or– positive results from tests showing mutagenic effects in the germ cells of humans, without demonstration of transmission to progeny; for example, an increase in the frequency of aneuploidy in sperm cells of exposed people.

<u>CATEGORY 2:</u>	<p>Substances which cause concern for humans owing to the possibility that they may induce heritable mutations in the germ cells of humans</p> <p>The classification in Category 2 is based on:</p> <ul style="list-style-type: none"> – positive evidence obtained from experiments in mammals and/or in some cases from in vitro experiments, obtained from: <ul style="list-style-type: none"> – somatic cell mutagenicity tests in vivo, in mammals; or – other in vivo somatic cell genotoxicity tests which are supported by positive results from in vitro mutagenicity assays. <p>Note: Substances which are positive in in vitro mammalian mutagenicity assays, and which also show chemical structure activity relationship to known germ cell mutagens, shall be considered for classification as Category 2 mutagens.</p>
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3.5.2.3. *Specific considerations for classification of substances as germ cell mutagens*

3.5.2.3.1. To arrive at a classification, test results are considered from experiments determining mutagenic and/or genotoxic effects in germ and/or somatic cells of exposed animals. Mutagenic and/or genotoxic effects determined in in vitro tests shall also be considered.

3.5.2.3.2. The system is hazard based, classifying substances on the basis of their intrinsic ability to induce mutations in germ cells. The scheme is, therefore, not meant for the (quantitative) risk assessment of substances.

3.5.2.3.3. Classification for heritable effects in human germ cells is made on the basis of well conducted, sufficiently validated tests, preferably as described in Regulation (EC) No 440/2008 adopted in accordance with Article 13(3) of Regulation (EC) No 1907/2006 ("Test Method Regulation") such as those listed in the following paragraphs. Evaluation of the test results shall be done using expert judgement and all the available evidence shall be weighed in arriving at a classification.

3.5.2.3.4. In vivo heritable germ cell mutagenicity tests, such as:

- rodent dominant lethal mutation test;

- mouse heritable translocation assay.

3.5.2.3.5. In vivo somatic cell mutagenicity tests, such as:

- mammalian bone marrow chromosome aberration test;
- mouse spot test;
- mammalian erythrocyte micronucleus test.

3.5.2.3.6. Mutagenicity/genotoxicity tests in germ cells, such as:

(a) mutagenicity tests:

- mammalian spermatogonial chromosome aberration test;
- spermatid micronucleus assay;

(b) Genotoxicity tests:

- sister chromatid exchange analysis in spermatogonia;
- unscheduled DNA synthesis test (UDS) in testicular cells.

3.5.2.3.7. Genotoxicity tests in somatic cells such as:

- liver Unscheduled synthesis test (UDS) in vivo;
- mammalian bone marrow Sister Chromatid Exchanges (SCE);

3.5.2.3.8. In vitro mutagenicity tests such as:

- in vitro mammalian chromosome aberration test;
- in vitro mammalian cell gene mutation test;
- bacterial reverse mutation tests.

3.5.2.3.9. The classification of individual substances shall be based on the total weight of evidence available, using expert judgement (See 1.1.1). In those instances where a single well-conducted test is used for classification, it shall provide clear and unambiguously positive results. If new, well validated, tests arise these may also be

used in the total weight of evidence to be considered. The relevance of the route of exposure used in the study of the substance compared to the route of human exposure shall also be taken into account.

3.5.3. Classification criteria for mixtures

3.5.3.1. *Classification of mixtures when data are available for all ingredients or only for some ingredients of the mixture*

3.5.3.1.1. The mixture shall be classified as a mutagen when at least one ingredient has been classified as a Category 1A, Category 1B or Category 2 mutagen and is present at or above the appropriate generic concentration limit as shown in Table 3.5.2 for Category 1A, Category 1B and Category 2 respectively.

Table 3.5.2
Generic concentration limits of ingredients of a mixture classified as germ cell mutagens that trigger classification of the mixture.

Ingredient classified as:	Concentration limits triggering classification of a mixture as:		
	Category 1A mutagen	Category 1B mutagen	Category 2 mutagen
Category 1A mutagen	≥ 0,1 %	–	–
Category 1B mutagen	–	≥ 0,1 %	–
Category 2 mutagen	–	–	≥ 1,0 %

Note:

The concentration limits in the table above apply to solids and liquids (w/w units) as well as gases (v/v units).

3.5.3.2. *Classification of mixtures when data are available for the complete mixture*

3.5.3.2.1. Classification of mixtures will be based on the available test data for the individual ingredients of the mixture using concentration limits for the ingredients classified as germ cell mutagens. On a case-by-case basis, test data on mixtures may be used for classification when demonstrating effects that have not been established from the

evaluation based on the individual ingredients. In such cases, the test results for the mixture as a whole must be shown to be conclusive taking into account dose and other factors such as duration, observations, sensitivity and statistical analysis of germ cell mutagenicity test systems. Adequate documentation supporting the classification shall be retained and made available for review upon request.



3.5.3.3. *Classification of mixtures when data are not available for the complete mixture: bridging principles*

3.5.3.3.1. Where the mixture itself has not been tested to determine its germ cell mutagenicity hazard, but there are sufficient data on the individual ingredients and similar tested mixtures (subject to paragraph 3.5.3.2.1), to adequately characterise the hazards of the mixture, these data shall be used in accordance with the applicable bridging rules set out in section 1.1.3.

3.5.4. **Hazard communication**

3.5.4.1. Label elements shall be used in accordance with Table 3.5.3, for substances or mixtures meeting the criteria for classification in this hazard class.

Table 3.5.3
Label elements of germ cell mutagenicity

Classification	Category 1A or Category 1B	Category 2
GHS Pictograms		
Signal Word	Danger	Warning
Hazard Statement	H340: May cause genetic defects (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)	H341: Suspected of causing genetic defects (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)
Precautionary Statement Prevention	P201 P202 P281	P201 P202 P281
Precautionary Statement Response	P308 + P313	P308 + P313
Precautionary Statement Storage	P405	P405
Precautionary Statement Disposal	P501	P501

3.5.5. Additional classification considerations

It is increasingly accepted that the process of chemical-induced tumorigenesis in humans and animals involves genetic changes for example in proto-oncogenes and/or tumour suppresser genes of somatic cells. Therefore, the demonstration of mutagenic properties of substances in somatic and/or germ cells of mammals in vivo may have implications for the potential classification of these substances as carcinogens (see also Carcinogenicity, section 3.6, paragraph 3.6.2.2.6).

3.6. CARCINOGENICITY

3.6.1. Definition

3.6.1.1. Carcinogen means a substance or a mixture of substances which induce cancer or increase its incidence. Substances which have induced benign and malignant tumours in well performed experimental studies on animals are considered also to be presumed or suspected human carcinogens unless there is strong evidence that the mechanism of tumour formation is not relevant for humans.

3.6.2. Classification criteria for substances

3.6.2.1. For the purpose of classification for carcinogenicity, substances are allocated to one of two categories based on strength of evidence and additional considerations (weight of evidence). In certain instances, route-specific classification may be warranted, if it can be conclusively proved that no other route of exposure exhibits the hazard.

Table 3.6.1
Hazard categories for carcinogens

Categories	Criteria
<p><u>CATEGORY 1:</u></p> <p>Category 1A:</p> <p>Category 1B:</p>	<p>Known or presumed human carcinogens</p> <p>A substance is classified in Category 1 for carcinogenicity on the basis of epidemiological and/or animal data. A substance may be further distinguished as:</p> <p>Category 1A, known to have carcinogenic potential for humans, classification is largely based on human evidence, or</p> <p>Category 1B, presumed to have carcinogenic potential for humans, classification is largely based on animal evidence.</p> <p>The classification in Category 1A and 1B is based on strength of evidence together with additional considerations (see section 3.6.2.2). Such evidence may be derived from:</p> <ul style="list-style-type: none"> – human studies that establish a causal relationship between human exposure to a substance and the development of cancer (known human carcinogen); or – animal experiments for which there is sufficient¹ evidence to demonstrate animal carcinogenicity (presumed human carcinogen).
	<p>In addition, on a case-by-case basis, scientific judgement may warrant a decision of presumed human carcinogenicity derived from studies showing limited evidence of carcinogenicity in humans together with limited evidence of carcinogenicity in experimental animals.</p>
<p><u>CATEGORY 2:</u></p>	<p>Suspected human carcinogens</p> <p>The placing of a substance in Category 2 is done on the basis of evidence obtained from human and/or animal studies, but which is not sufficiently convincing to place the substance</p>

¹ Note: See 3.6.2.2.4.

	in Category 1A or 1B, based on strength of evidence together with additional considerations (see section 3.6.2.2). Such evidence may be derived either from limited ¹ evidence of carcinogenicity in human studies or from limited evidence of carcinogenicity in animal studies.
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3.6.2.2. *Specific considerations for classification of substances as carcinogens*

3.6.2.2.1. Classification as a carcinogen is made on the basis of evidence from reliable and acceptable studies and is intended to be used for substances which have an intrinsic property to cause cancer. The evaluations shall be based on all existing data, peer-reviewed published studies and additional acceptable data.

3.6.2.2.2. Classification of a substance as a carcinogen is a process that involves two interrelated determinations: evaluations of strength of evidence and consideration of all other relevant information to place substances with human cancer potential into hazard categories.

3.6.2.2.3. Strength of evidence involves the enumeration of tumours in human and animal studies and determination of their level of statistical significance. Sufficient human evidence demonstrates causality between human exposure and the development of cancer, whereas sufficient evidence in animals shows a causal relationship between the substance and an increased incidence of tumours. Limited evidence in humans is demonstrated by a positive association between exposure and cancer, but a causal relationship cannot be stated. Limited evidence in animals is provided when data suggest a carcinogenic effect, but are less than sufficient. The terms "sufficient" and "limited" have been used here as they have been defined by the International Agency for Research on Cancer (IARC) and read as follows:

(a) Carcinogenicity in humans

The evidence relevant to carcinogenicity from studies in humans is classified into one of the following categories:

¹ Note: See 3.6.2.2.4.

- sufficient evidence of carcinogenicity: a causal relationship has been established between exposure to the agent and human cancer. That is, a positive relationship has been observed between the exposure and cancer in studies in which chance, bias and confounding could be ruled out with reasonable confidence;
- limited evidence of carcinogenicity: a positive association has been observed between exposure to the agent and cancer for which a causal interpretation is considered to be credible, but chance, bias or confounding could not be ruled out with reasonable confidence.

(b) Carcinogenicity in experimental animals

Carcinogenicity in experimental animals can be evaluated using conventional bioassays, bioassays that employ genetically modified animals, and other in-vivo bioassays that focus on one or more of the critical stages of carcinogenesis. In the absence of data from conventional long-term bioassays or from assays with neoplasia as the end-point, consistently positive results in several models that address several stages in the multistage process of carcinogenesis should be considered in evaluating the degree of evidence of carcinogenicity in experimental animals. The evidence relevant to carcinogenicity in experimental animals is classified into one of the following categories:

- sufficient evidence of carcinogenicity: a causal relationship has been established between the agent and an increased incidence of malignant neoplasms or of an appropriate combination of benign and malignant neoplasms in (a) two or more species of animals or (b) two or more independent studies in one species carried out at different times or in different laboratories or under different protocols. An increased incidence of tumours in both sexes of a single species in a well-conducted study, ideally conducted under Good Laboratory Practices, can also provide sufficient evidence. A single study in one species and sex might be considered to provide sufficient evidence of carcinogenicity when malignant neoplasms occur to an unusual degree with regard to

incidence, site, type of tumour or age at onset, or when there are strong findings of tumours at multiple sites;

- limited evidence of carcinogenicity: the data suggest a carcinogenic effect but are limited for making a definitive evaluation because, e.g. (a) the evidence of carcinogenicity is restricted to a single experiment; (b) there are unresolved questions regarding the adequacy of the design, conduct or interpretation of the studies; (c) the agent increases the incidence only of benign neoplasms or lesions of uncertain neoplastic potential; or (d) the evidence of carcinogenicity is restricted to studies that demonstrate only promoting activity in a narrow range of tissues or organs.

3.6.2.2.4. Additional considerations (as part of the weight of evidence approach (see 1.1.1)). Beyond the determination of the strength of evidence for carcinogenicity, a number of other factors need to be considered that influence the overall likelihood that a substance poses a carcinogenic hazard in humans. The full list of factors that influence this determination would be very lengthy, but some of the more important ones are considered here.

3.6.2.2.5. The factors can be viewed as either increasing or decreasing the level of concern for human carcinogenicity. The relative emphasis accorded to each factor depends upon the amount and coherence of evidence bearing on each. Generally there is a requirement for more complete information to decrease than to increase the level of concern. Additional considerations should be used in evaluating the tumour findings and the other factors in a case-by-case manner.

3.6.2.2.6. Some important factors which may be taken into consideration, when assessing the overall level of concern are:

- (a) tumour type and background incidence;
- (b) multi-site responses;
- (c) progression of lesions to malignancy;
- (d) reduced tumour latency;

- (e) whether responses are in single or both sexes;
- (f) whether responses are in a single species or several species;
- (g) structural similarity to a substance(s) for which there is good evidence of carcinogenicity;
- (h) routes of exposure;
- (i) comparison of absorption, distribution, metabolism and excretion between test animals and humans;
- (j) the possibility of a confounding effect of excessive toxicity at test doses;
- (k) mode of action and its relevance for humans, such as cytotoxicity with growth stimulation, mitogenesis, immunosuppression, mutagenicity.

Mutagenicity: it is recognised that genetic events are central in the overall process of cancer development. Therefore evidence of mutagenic activity *in vivo* may indicate that a substance has a potential for carcinogenic effects.

3.6.2.2.7. A substance that has not been tested for carcinogenicity may in certain instances be classified in Category 1A, Category 1B or Category 2 based on tumour data from a structural analogue together with substantial support from consideration of other important factors such as formation of common significant metabolites, e.g. for benzidine congener dyes.

3.6.2.2.8. The classification shall take into consideration whether or not the substance is absorbed by a given route(s); or whether there are only local tumours at the site of administration for the tested route(s), and adequate testing by other major route(s) show lack of carcinogenicity.

3.6.2.2.9. It is important that whatever is known of the physico-chemical, toxicokinetic and toxicodynamic properties of the substances, as well as any available relevant information on chemical analogues, i.e. structure activity relationship, is taken into consideration when undertaking classification.

3.6.3. Classification criteria for mixtures

3.6.3.1. Classification of mixtures when data are available for all ingredients or only for some ingredients of the mixture

3.6.3.1.1. The mixture will be classified as a carcinogen when at least one ingredient has been classified as a Category 1A, Category 1B or Category 2 carcinogen and is present at or above the appropriate generic concentration limit as shown in Table 3.6.2 for Category 1A, Category 1B and Category 2 respectively.

Table 3.6.2
Generic concentration limits of ingredients of a mixture classified as carcinogen that trigger classification of the mixture

Ingredient classified as:	Generic concentration limits triggering classification of a mixture as:		
	Category 1A carcinogen	Category 1B carcinogen	Category 2 carcinogen
Category 1A carcinogen	≥ 0,1 %	-	-
Category 1B carcinogen	-	≥ 0,1 %	-
Category 2 carcinogen	-	-	≥ 1,0 % [Note 1]

Note:

The concentration limits in the table above apply to solids and liquids (w/w units) as well as gases (v/v units).

Note 1:

If a Category 2 carcinogen is present in the mixture as an ingredient at a concentration • 0,1 % a SDS shall be available for the mixture upon request.

3.6.3.2. Classification of mixtures when data are available for the complete mixture

3.6.3.2.1. Classification of mixtures will be based on the available test data for the individual ingredients of the mixture using concentration limits for the ingredients classified as carcinogens. On a case-by-case basis, test data on mixtures may be used for classification when demonstrating effects that have not been established from the evaluation based on the individual ingredients. In such cases, the test results for the

mixture as a whole must be shown to be conclusive taking into account dose and other factors such as duration, observations, sensitivity and statistical analysis of carcinogenicity test systems. Adequate documentation supporting the classification shall be retained and made available for review upon request.



3.6.3.3. *Classification of mixtures when data are not available for the complete mixture: bridging principles*

3.6.3.3.1. Where the mixture itself has not been tested to determine its carcinogenic hazard, but there are sufficient data on the individual ingredients and similar tested mixtures (subject to paragraph 3.6.3.2.1) to adequately characterise the hazards of the mixture, these data shall be used in accordance with the applicable bridging rules set out in section 1.1.3.

3.6.4. **Hazard Communication**

3.6.4.1. Label elements shall be used in accordance with Table 3.6.3, for substances or mixtures meeting the criteria for classification in this hazard class.

Table 3.6.3
Label elements for carcinogenicity

Classification	Category 1A or Category 1B	Category 2
GHS Pictograms		
Signal Word	Danger	Warning
Hazard Statement	H350: May cause cancer (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)	H351: Suspected of causing cancer (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)
Precautionary Statement Prevention	P201 P202 P281	P201 P202 P281
Precautionary Statement Response	P308 + P313	P308 + P313
Precautionary Statement Storage	P405	P405
Precautionary Statement Disposal	P501	P501

3.7. REPRODUCTIVE TOXICITY

3.7.1. Definitions and general considerations

3.7.1.1. Reproductive toxicity includes adverse effects on sexual function and fertility in adult males and females, as well as developmental toxicity in the offspring. The definitions presented below are adapted from those agreed as working definitions in IPCS/EHC Document N°225, Principles for Evaluating Health Risks to Reproduction Associated with Exposure to Chemicals. For classification purposes, the known induction of genetically based heritable effects in the offspring is addressed in Germ Cell Mutagenicity

(section 3.5), since in the present classification system it is considered more appropriate to address such effects under the separate hazard class of germ cell mutagenicity.

In this classification system, reproductive toxicity is subdivided under two main headings:

- (a) adverse effects on sexual function and fertility;
- (b) adverse effects on development of the offspring.

Some reproductive toxic effects cannot be clearly assigned to either impairment of sexual function and fertility or to developmental toxicity. Nonetheless, substances with these effects, or mixtures containing them, shall be classified as reproductive toxicants.

3.7.1.2. For the purpose of classification the hazard class Reproductive Toxicity is differentiated into:

- adverse effects
 - on sexual function and fertility, or
 - on development;
- effects on or via lactation.

3.7.1.3. *Adverse effects on sexual function and fertility*

Any effect of substances that has the potential to interfere with sexual function and fertility. This includes, but is not limited to, alterations to the female and male reproductive system, adverse effects on onset of puberty, gamete production and transport, reproductive cycle normality, sexual behaviour, fertility, parturition, pregnancy outcomes, premature reproductive senescence, or modifications in other functions that are dependent on the integrity of the reproductive systems.

3.7.1.4. *Adverse effects on development of the offspring*

Developmental toxicity includes, in its widest sense, any effect which interferes with normal development of the conceptus, either before or after birth, and resulting from exposure of either parent prior to conception, or exposure of the developing offspring during prenatal development, or postnatally, to the time of sexual maturation. However,

it is considered that classification under the heading of developmental toxicity is primarily intended to provide a hazard warning for pregnant women, and for men and women of reproductive capacity. Therefore, for pragmatic purposes of classification, developmental toxicity essentially means adverse effects induced during pregnancy, or as a result of parental exposure. These effects can be manifested at any point in the life span of the organism. The major manifestations of developmental toxicity include (1) death of the developing organism, (2) structural abnormality, (3) altered growth, and (4) functional deficiency.

3.7.1.5. Adverse effects on or via lactation are also included in reproductive toxicity, but for classification purposes, such effects are treated separately (see Table 3.7.1 (b)). This is because it is desirable to be able to classify substances specifically for an adverse effect on lactation so that a specific hazard warning about this effect can be provided for lactating mothers.

3.7.2. Classification criteria for substances

3.7.2.1. *Hazard categories*

3.7.2.1.1. For the purpose of classification for reproductive toxicity, substances are allocated to one of two categories. Within each category, effects on sexual function and fertility, and on development, are considered separately. In addition, effects on lactation are allocated to a separate hazard category.

Table 3.7.1(a)
Hazard categories for reproductive toxicants

Categories	Criteria
<p>CATEGORY 1</p> <p>Category 1A</p> <p>Category 1B</p>	<p>Known or presumed human reproductive toxicant</p> <p>Substances are classified in Category 1 for reproductive toxicity when they are known to have produced an adverse effect on sexual function and fertility, or on development in humans or when there is evidence from animal studies, possibly supplemented with other information, to provide a strong presumption that the substance has the capacity to interfere with reproduction in humans. The classification of a substance is further distinguished on the basis of whether the evidence for classification is primarily from human data (Category 1A) or from animal data (Category 1B).</p> <p>Known human reproductive toxicant</p> <p>The classification of a substance in Category 1A is largely based on evidence from humans.</p> <p>Presumed human reproductive toxicant</p> <p>The classification of a substance in Category 1B is largely based on data from animal studies. Such data shall provide clear evidence of an adverse effect on sexual function and fertility or on development in the absence of other toxic effects, or if occurring together with other toxic effects the adverse effect on reproduction is considered not to be a secondary non-specific consequence of other toxic effects. However, when there is mechanistic information that raises doubt about the relevance of the effect for humans, classification in Category 2 may be more appropriate.</p>

<p>CATEGORY 2</p>	<p>Suspected human reproductive toxicant</p> <p>Substances are classified in Category 2 for reproductive toxicity when there is some evidence from humans or experimental animals, possibly supplemented with other information, of an adverse effect on sexual function and fertility, or on development, and where the evidence is not sufficiently convincing to place the substance in Category 1. If deficiencies in the study make the quality of evidence less convincing, Category 2 could be the more appropriate classification.</p> <p>Such effects shall have been observed in the absence of other toxic effects, or if occurring together with other toxic effects the adverse effect on reproduction is considered not to be a secondary non-specific consequence of the other toxic effects.</p>
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Table 3.7.1(b)

Hazard category for lactation effects

<p>EFFECTS ON OR VIA LACTATION</p> <p>Effects on or via lactation are allocated to a separate single category. It is recognised that for many substances there is no information on the potential to cause adverse effects on the offspring via lactation. However, substances which are absorbed by women and have been shown to interfere with lactation, or which may be present (including metabolites) in breast milk in amounts sufficient to cause concern for the health of a breastfed child, shall be classified and labelled to indicate this property hazardous to breastfed babies. This classification can be assigned on the:</p> <ul style="list-style-type: none"> (a) human evidence indicating a hazard to babies during the lactation period; and/or (b) results of one or two generation studies in animals which provide clear evidence of adverse effect in the offspring due to transfer in the milk or adverse effect on the quality of the milk; and/or (c) absorption, metabolism, distribution and excretion studies that indicate the likelihood that the substance is present in potentially toxic levels in breast milk.
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3.7.2.2. Basis of classification

3.7.2.2.1. Classification is made on the basis of the appropriate criteria, outlined above, and an assessment of the total weight of evidence (see 1.1.1). Classification as a

reproductive toxicant is intended to be used for substances which have an intrinsic, specific property to produce an adverse effect on reproduction and substances shall not be so classified if such an effect is produced solely as a non-specific secondary consequence of other toxic effects.

The classification of a substance is derived from the hazard categories in the following order of precedence: Category 1A, Category 1B, Category 2 and the additional Category for effects on or via lactation. If a substance meets the criteria for classification into both of the main categories (for example Category 1B for effects on sexual function and fertility and also Category 2 for development) then both hazard differentiations shall be communicated by the respective hazard statements. Classification in the additional category for effects on or via lactation will be considered irrespective of a classification into Category 1A, Category 1B or Category 2.

3.7.2.2.2. In the evaluation of toxic effects on the developing offspring, it is important to consider the possible influence of maternal toxicity (see section 3.7.2.4).

3.7.2.2.3. For human evidence to provide the primary basis for a Category 1A classification there must be reliable evidence of an adverse effect on reproduction in humans. Evidence used for classification shall ideally be from well conducted epidemiological studies which include the use of appropriate controls, balanced assessment, and due consideration of bias or confounding factors. Less rigorous data from studies in humans shall be supplemented with adequate data from studies in experimental animals and classification in Category 1B shall be considered.

3.7.2.3. Weight of evidence

3.7.2.3.1. Classification as a reproductive toxicant is made on the basis of an assessment of the total weight of evidence, see section 1.1.1. This means that all available information that bears on the determination of reproductive toxicity is considered together, such as epidemiological studies and case reports in humans and specific reproduction studies along with sub-chronic, chronic and special study results in animals that provide relevant information regarding toxicity to reproductive and related endocrine organs. Evaluation of substances chemically related to the substance under study may also be included, particularly when information on the substance is scarce. The

weight given to the available evidence will be influenced by factors such as the quality of the studies, consistency of results, nature and severity of effects, the presence of maternal toxicity in experimental animal studies, level of statistical significance for inter-group differences, number of endpoints affected, relevance of route of administration to humans and freedom from bias. Both positive and negative results are assembled together into a weight of evidence determination. A single, positive study performed according to good scientific principles and with statistically or biologically significant positive results may justify classification (see also 3.7.2.2.3).

- 3.7.2.3.2. Toxicokinetic studies in animals and humans, site of action and mechanism or mode of action study results may provide relevant information which reduces or increases concerns about the hazard to human health. If it is conclusively demonstrated that the clearly identified mechanism or mode of action has no relevance for humans or when the toxicokinetic differences are so marked that it is certain that the hazardous property will not be expressed in humans then a substance which produces an adverse effect on reproduction in experimental animals should not be classified.
- 3.7.2.3.3. If, in some reproductive toxicity studies in experimental animals the only effects recorded are considered to be of low or minimal toxicological significance, classification may not necessarily be the outcome. These effects include small changes in semen parameters or in the incidence of spontaneous defects in the foetus, small changes in the proportions of common foetal variants such as are observed in skeletal examinations, or in foetal weights, or small differences in postnatal developmental assessments.
- 3.7.2.3.4. Data from animal studies ideally shall provide clear evidence of specific reproductive toxicity in the absence of other systemic toxic effects. However, if developmental toxicity occurs together with other toxic effects in the dam, the potential influence of the generalised adverse effects shall be assessed to the extent possible. The preferred approach is to consider adverse effects in the embryo/foetus first, and then evaluate maternal toxicity, along with any other factors which are likely to have influenced these effects, as part of the weight of evidence. In general, developmental effects that are observed at maternally toxic doses shall not be automatically discounted. Discounting developmental effects that are observed at maternally toxic doses can

only be done on a case-by-case basis when a causal relationship is established or refuted.

- 3.7.2.3.5. If appropriate information is available it is important to try to determine whether developmental toxicity is due to a specific maternally mediated mechanism or to a non-specific secondary mechanism, like maternal stress and the disruption of homeostasis. Generally, the presence of maternal toxicity shall not be used to negate findings of embryo/foetal effects, unless it can be clearly demonstrated that the effects are secondary non-specific effects. This is especially the case when the effects in the offspring are significant, e.g. irreversible effects such as structural malformations. In some situations it can be assumed that reproductive toxicity is due to a secondary consequence of maternal toxicity and discount the effects, if the substance is so toxic that dams fail to thrive and there is severe inanition, they are incapable of nursing pups; or they are prostrate or dying.

3.7.2.4. Maternal toxicity

- 3.7.2.4.1. Development of the offspring throughout gestation and during the early postnatal stages can be influenced by toxic effects in the mother either through non-specific mechanisms related to stress and the disruption of maternal homeostasis, or by specific maternally-mediated mechanisms. In the interpretation of the developmental outcome to decide classification for developmental effects it is important to consider the possible influence of maternal toxicity. This is a complex issue because of uncertainties surrounding the relationship between maternal toxicity and developmental outcome. Expert judgement and a weight of evidence approach, using all available studies, shall be used to determine the degree of influence that shall be attributed to maternal toxicity when interpreting the criteria for classification for developmental effects. The adverse effects in the embryo/foetus shall be first considered, and then maternal toxicity, along with any other factors which are likely to have influenced these effects, as weight of evidence, to help reach a conclusion about classification.
- 3.7.2.4.2. Based on pragmatic observation, maternal toxicity may, depending on severity, influence development via non-specific secondary mechanisms, producing effects such as depressed foetal weight, retarded ossification, and possibly resorptions and

certain malformations in some strains of certain species. However, the limited number of studies which have investigated the relationship between developmental effects and general maternal toxicity have failed to demonstrate a consistent, reproducible relationship across species. Developmental effects which occur even in the presence of maternal toxicity are considered to be evidence of developmental toxicity, unless it can be unequivocally demonstrated on a case-by-case basis that the developmental effects are secondary to maternal toxicity. Moreover, classification shall be considered where there is a significant toxic effect in the offspring, e.g. irreversible effects such as structural malformations, embryo/foetal lethality, significant post-natal functional deficiencies.

3.7.2.4.3. Classification shall not automatically be discounted for substances that produce developmental toxicity only in association with maternal toxicity, even if a specific maternally-mediated mechanism has been demonstrated. In such a case, classification in Category 2 may be considered more appropriate than Category 1. However, when a substance is so toxic that maternal death or severe inanition results, or the dams are prostrate and incapable of nursing the pups, it is reasonable to assume that developmental toxicity is produced solely as a secondary consequence of maternal toxicity and discount the developmental effects. Classification is not necessarily the outcome in the case of minor developmental changes, when there is only a small reduction in foetal/pup body weight or retardation of ossification when seen in association with maternal toxicity.

3.7.2.4.4. Some of the end points used to assess maternal effects are provided below. Data on these end points, if available, need to be evaluated in light of their statistical or biological significance and dose response relationship.

Maternal mortality: an increased incidence of mortality among the treated dams over the controls shall be considered evidence of maternal toxicity if the increase occurs in a dose-related manner and can be attributed to the systemic toxicity of the test material. Maternal mortality greater than 10 % is considered excessive and the data for that dose level shall not normally be considered for further evaluation.

Mating index (no. animals with seminal plugs or sperm/no. mated x 100)¹

Fertility index (no. animals with implants/no. of matings x 100)

Gestation length (if allowed to deliver)

Body weight and body weight change: Consideration of the maternal body weight change and/or adjusted (corrected) maternal body weight shall be included in the evaluation of maternal toxicity whenever such data are available. The calculation of an adjusted (corrected) mean maternal body weight change, which is the difference between the initial and terminal body weight minus the gravid uterine weight (or alternatively, the sum of the weights of the foetuses), may indicate whether the effect is maternal or intrauterine. In rabbits, the body weight gain may not be useful indicators of maternal toxicity because of normal fluctuations in body weight during pregnancy.

Food and water consumption (if relevant): The observation of a significant decrease in the average food or water consumption in treated dams compared to the control group is useful in evaluating maternal toxicity, particularly when the test material is administered in the diet or drinking water. Changes in food or water consumption need to be evaluated in conjunction with maternal body weights when determining if the effects noted are reflective of maternal toxicity or more simply, unpalatability of the test material in feed or water.

Clinical evaluations (including clinical signs, markers, haematology and clinical chemistry studies): The observation of increased incidence of significant clinical signs of toxicity in treated dams relative to the control group is useful in evaluating maternal toxicity. If this is to be used as the basis for the assessment of maternal toxicity, the types, incidence, degree and duration of clinical signs shall be reported in the study. Clinical signs of maternal intoxication include: coma, prostration, hyperactivity, loss of righting reflex, ataxia, or laboured breathing.

¹ It is recognised that the Mating index and the Fertility index can also be affected by the male.

Post-mortem data: Increased incidence and/or severity of post-mortem findings may be indicative of maternal toxicity. This can include gross or microscopic pathological findings or organ weight data, including absolute organ weight, organ-to-body weight ratio, or organ-to-brain weight ratio. When supported by findings of adverse histopathological effects in the affected organ(s), the observation of a significant change in the average weight of suspected target organ(s) of treated dams, compared to those in the control group, may be considered evidence of maternal toxicity.

3.7.2.5. Animal and experimental data

- 3.7.2.5.1. A number of internationally accepted test methods are available; these include methods for developmental toxicity testing (e.g. OECD Test Guideline 414), and methods for one or two-generation toxicity testing (e.g. OECD Test Guidelines 415, 416).
- 3.7.2.5.2. Results obtained from Screening Tests (e.g. OECD Guidelines 421 – Reproduction/Developmental Toxicity Screening Test, and 422 – Combined Repeated Dose Toxicity Study with Reproduction/Development Toxicity Screening Test) can also be used to justify classification, although it is recognised that the quality of this evidence is less reliable than that obtained through full studies.
- 3.7.2.5.3. Adverse effects or changes, seen in short- or long-term repeated dose toxicity studies, which are judged likely to impair reproductive function and which occur in the absence of significant generalised toxicity, may be used as a basis for classification, e.g. histopathological changes in the gonads.
- 3.7.2.5.4. Evidence from in vitro assays, or non-mammalian tests, and from analogous substances using structure-activity relationship (SAR), can contribute to the procedure for classification. In all cases of this nature, expert judgement must be used to assess the adequacy of the data. Inadequate data shall not be used as a primary support for classification.
- 3.7.2.5.5. It is preferable that animal studies are conducted using appropriate routes of administration which relate to the potential route of human exposure. However, in practice, reproductive toxicity studies are commonly conducted using the oral route, and such studies will normally be suitable for evaluating the hazardous properties of

the substance with respect to reproductive toxicity. However, if it can be conclusively demonstrated that the clearly identified mechanism or mode of action has no relevance for humans or when the toxicokinetic differences are so marked that it is certain that the hazardous property will not be expressed in humans then a substance which produces an adverse effect on reproduction in experimental animals shall not be classified.

- 3.7.2.5.6. Studies involving routes of administration such as intravenous or intraperitoneal injection, which result in exposure of the reproductive organs to unrealistically high levels of the test substance, or elicit local damage to the reproductive organs, including irritation, must be interpreted with extreme caution and on their own are not normally the basis for classification.
- 3.7.2.5.7. There is general agreement about the concept of a limit dose, above which the production of an adverse effect is considered to be outside the criteria which lead to classification, but not regarding the inclusion within the criteria of a specific dose as a limit dose. However, some guidelines for test methods, specify a limit dose, others qualify the limit dose with a statement that higher doses may be necessary if anticipated human exposure is sufficiently high that an adequate margin of exposure is not achieved. Also, due to species differences in toxicokinetics, establishing a specific limit dose may not be adequate for situations where humans are more sensitive than the animal model.
- 3.7.2.5.8. In principle, adverse effects on reproduction seen only at very high dose levels in animal studies (for example doses that induce prostration, severe inappetence, excessive mortality) would not normally lead to classification, unless other information is available, e.g. toxicokinetics information indicating that humans may be more susceptible than animals, to suggest that classification is appropriate. Please also refer to the section on maternal toxicity (3.7.2.4) for further guidance in this area.
- 3.7.2.5.9. However, specification of the actual "limit dose" will depend upon the test method that has been employed to provide the test results, e.g. in the OECD Test Guideline for repeated dose toxicity studies by the oral route, an upper dose of 1000 mg/kg has

been recommended as a limit dose, unless expected human response indicates the need for a higher dose level.

3.7.3. Classification criteria for mixtures

3.7.3.1. *Classification of mixtures when data are available for all ingredients or only for some ingredients of the mixture*

- 3.7.3.1.1. The mixture shall be classified as a reproductive toxicant when at least one ingredient has been classified as a Category 1A, Category 1B or Category 2 reproductive toxicant and is present at or above the appropriate generic concentration limit as shown in Table 3.7.2 for Category 1A, Category 1B and Category 2 respectively.
- 3.7.3.1.2. The mixture shall be classified for effects on or via lactation when at least one ingredient has been classified for effects on or via lactation and is present at or above the appropriate generic concentration limit as shown in Table 3.7.2 for the additional category for effects on or via lactation.

Table 3.7.2**Generic concentration limits of ingredients of a mixture classified as reproduction toxicants or for effects on or via lactation that trigger classification of the mixture**

Ingredient classified as:	Generic concentration limits triggering classification of a mixture as:			
	Category 1A reproductive toxicant	Category 1B reproductive toxicant	Category 2 reproductive toxicant	Additional category for effects on or via lactation
Category 1A reproductive toxicant	≥ 0,3 % [Note 1]			
Category 1B reproductive toxicant		≥ 0,3 % [Note 1]		
Category 2 reproductive toxicant			≥ 3,0 % [Note 1]	
Additional category for effects on or via lactation				≥ 0,3 % [Note 1]

Note

The concentration limits in the table above apply to solids and liquids (w/w units) as well as gases (v/v units).

Note 1

If a Category 1 or Category 2 reproductive toxicant or a substance classified for effects on or via lactation is present in the mixture as an ingredient at a concentration above 0,1 %, a SDS shall be available for the mixture upon request.

3.7.3.2. Classification of mixtures when data are available for the complete mixture

- 3.7.3.2.1. Classification of mixtures will be based on the available test data for the individual ingredients of the mixture using concentration limits for the ingredients of the mixture. On a case-by-case basis, test data on mixtures may be used for classification when demonstrating effects that have not been established from the evaluation based on the individual components. In such cases, the test results for the mixture as a whole must be shown to be conclusive taking into account dose and other factors

such as duration, observations, sensitivity and statistical analysis of reproduction test systems. Adequate documentation supporting the classification shall be retained and made available for review upon request.



3.7.3.3. *Classification of mixtures when data are not available for the complete mixture: bridging principles*

3.7.3.3.1. Subject to paragraph 3.7.3.2.1, where the mixture itself has not been tested to determine its reproductive toxicity, but there are sufficient data on the individual ingredients and similar tested mixtures to adequately characterise the hazards of the mixture, these data shall be used in accordance with the applicable bridging rules set out in section 1.1.3.

3.7.4. **Hazard Communication**

3.7.4.1. Label elements shall be used for substances or mixtures meeting the criteria for classification in this hazard class in accordance with Table 3.7.3

Table 3.7.3**Label elements for reproductive toxicity**

Classification	Category 1A or Category 1B	Category 2	Additional category for effects on or via lactation
GHS Pictograms			No pictogram
Signal Word	Danger	Warning	No signal word
Hazard Statement	H360: May damage fertility or the unborn child (state specific effect if known)(state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)	H361: Suspected of damaging fertility or the unborn child (state specific effect if known) (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)	H362: May cause harm to breast-fed children.
Precautionary Statement Prevention	P201 P202 P281	P201 P202 P281	P201 P260 P263 P264 P270
Precautionary Statement Response	P308 + P313	P308 + P313	P308 + P313
Precautionary Statement Storage	P405	P405	
Precautionary Statement Disposal	P501	P501	

3.8. SPECIFIC TARGET ORGAN TOXICITY – SINGLE EXPOSURE**3.8.1. Definitions and general considerations**

- 3.8.1.1. Specific target organ toxicity (single exposure) is defined as specific, non lethal target organ toxicity arising from a single exposure to a substance or mixture. All significant health effects that can impair function, both reversible and irreversible, immediate and/or delayed and not specifically addressed in sections 3.1 to 3.7 and 3.10 are included (see also 3.8.1.6).
- 3.8.1.2. Classification identifies the substance or mixture as being a specific target organ toxicant and, as such, it may present a potential for adverse health effects in people who are exposed to it.
- 3.8.1.3. These adverse health effects produced by a single exposure include consistent and identifiable toxic effects in humans, or, in experimental animals, toxicologically significant changes which have affected the function or morphology of a tissue/organ, or have produced serious changes to the biochemistry or haematology of the organism, and these changes are relevant for human health.
- 3.8.1.4. Assessment shall take into consideration not only significant changes in a single organ or biological system but also generalised changes of a less severe nature involving several organs.
- 3.8.1.5. Specific target organ toxicity can occur by any route that is relevant for humans, i.e. principally oral, dermal or inhalation.
- 3.8.1.6. Specific target organ toxicity following a repeated exposure is classified as described in Specific target organ toxicity – Repeated exposure (section 3.9) and is therefore excluded from section 3.8. Other specific toxic effects, listed below, are assessed separately and consequently are not included here:
- (a) Acute toxicity (section 3.1);
 - (b) Skin corrosion/irritation (section 3.2);
 - (c) Serious eye damage/eye irritation (section 3.3);
 - (d) Respiratory or skin sensitisation (section 3.4);
 - (e) Germ cell mutagenicity (section 3.5);

- (f) Carcinogenicity (section 3.6);
- (g) Reproductive toxicity (section 3.7); and
- (h) Aspiration toxicity (section 3.10).

3.8.1.7. The hazard class Specific Target Organ Toxicity – Single Exposure is differentiated into:

- Specific target organ toxicity – single exposure, Category 1 and 2;
- Specific target organ toxicity – single exposure, Category 3.

See Table 3.8.1.

Table 3.8.1**Categories for specific target organ toxicity-single exposure**

Categories	Criteria
Category 1	<p>Substances that have produced significant toxicity in humans or that, on the basis of evidence from studies in experimental animals, can be presumed to have the potential to produce significant toxicity in humans following single exposure</p> <p>Substances are classified in Category 1 for specific target organ toxicity (single exposure) on the basis of:</p> <ul style="list-style-type: none">(a) reliable and good quality evidence from human cases or epidemiological studies; or(b) observations from appropriate studies in experimental animals in which significant and/or severe toxic effects of relevance to human health were produced at generally low exposure concentrations. Guidance dose/concentration values are provided below (see 3.8.2.1.9) to be used as part of weight-of-evidence evaluation.
Category 2	<p>Substances that, on the basis of evidence from studies in experimental animals can be presumed to have the potential to be harmful to human health following single exposure</p> <p>Substances are classified in Category 2 for specific target organ toxicity (single exposure) on the basis of observations from appropriate studies in experimental animals in which significant toxic effects, of relevance to human health, were produced at generally moderate exposure concentrations. Guidance dose/concentration values are provided below (see 3.8.2.1.9) in order to help in classification.</p> <p>In exceptional cases, human evidence can also be used to place a substance in Category 2 (see 3.8.2.1.6).</p>
Category 3	<p>Transient target organ effects</p> <p>This category only includes narcotic effects and respiratory tract irritation. These are target organ effects for which a substance does not meet the criteria to be classified in Categories 1 or 2 indicated above. These are effects which adversely alter human function for a short duration after exposure and from which humans may recover in a reasonable period without leaving significant alteration of structure or function. Substances are classified specifically</p>

	for these effects as laid down in 3.8.2.2.
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Note: Attempts shall be made to determine the primary target organ of toxicity and to classify for that purpose, such as hepatotoxicants, neurotoxicants. The data shall be carefully evaluated and, where possible, secondary effects should not be included (e.g. a hepatotoxicant can produce secondary effects in the nervous or gastro-intestinal systems).
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3.8.2. Classification criteria for substances

3.8.2.1. *Substances of Category 1 and Category 2*

- 3.8.2.1.1. Substances are classified for immediate or delayed effects separately, by the use of expert judgement (see 1.1.1) on the basis of the weight of all evidence available, including the use of recommended guidance values (see 3.8.2.1.9). Substances are then placed in Category 1 or 2, depending upon the nature and severity of the effect(s) observed (Table 3.8.1).
- 3.8.2.1.2. The relevant route or routes of exposure by which the classified substance produces damage shall be identified (see 3.8.1.5).
- 3.8.2.1.3. Classification is determined by expert judgement (see section 1.1.1), on the basis of the weight of all evidence available including the guidance presented below.
- 3.8.2.1.4. Weight of evidence of all data (see section 1.1.1), including human incidents, epidemiology, and studies conducted in experimental animals, is used to substantiate specific target organ toxic effects that merit classification.
- 3.8.2.1.5. The information required to evaluate specific target organ toxicity comes either from single exposure in humans, such as: exposure at home, in the workplace or environmentally, or from studies conducted in experimental animals. The standard animal studies in rats or mice that provide this information are acute toxicity studies which can include clinical observations and detailed macroscopic and microscopic examination to enable the toxic effects on target tissues/organs to be identified. Results of acute toxicity studies conducted in other species may also provide relevant information.
- 3.8.2.1.6. In exceptional cases, based on expert judgement, it is appropriate to place certain substances with human evidence of target organ toxicity in Category 2:

- (a) when the weight of human evidence is not sufficiently convincing to warrant Category 1 classification, and/or
- (b) based on the nature and severity of effects.

Dose/concentration levels in humans shall not be considered in the classification and any available evidence from animal studies shall be consistent with the Category 2 classification. In other words, if there are also animal data available on the substance that warrant Category 1 classification, the substance shall be classified as Category 1.

3.8.2.1.7. *Effects considered to support classification for Category 1 and 2*

- 3.8.2.1.7.1. Classification is supported by evidence associating single exposure to the substance with a consistent and identifiable toxic effect.
- 3.8.2.1.7.2. Evidence from human experience/incidents is usually restricted to reports of adverse health consequence, often with uncertainty about exposure conditions, and may not provide the scientific detail that can be obtained from well-conducted studies in experimental animals.
- 3.8.2.1.7.3. Evidence from appropriate studies in experimental animals can furnish much more detail, in the form of clinical observations, and macroscopic and microscopic pathological examination, and this can often reveal hazards that may not be life-threatening but could indicate functional impairment. Consequently all available evidence, and relevance to human health, must be taken into consideration in the classification process, including but not limited to the following effects in humans and/or animals:
 - (a) morbidity resulting from single exposure;
 - (b) significant functional changes, more than transient in nature, in the respiratory system, central or peripheral nervous systems, other organs or other organ systems, including signs of central nervous system depression and effects on special senses (such as sight, hearing and sense of smell);
 - (c) any consistent and significant adverse change in clinical biochemistry, haematology, or urinalysis parameters;

- (d) significant organ damage noted at necropsy and/or subsequently seen or confirmed at microscopic examination;
- (e) multi-focal or diffuse necrosis, fibrosis or granuloma formation in vital organs with regenerative capacity;
- (f) morphological changes that are potentially reversible but provide clear evidence of marked organ dysfunction;
- (g) evidence of appreciable cell death (including cell degeneration and reduced cell number) in vital organs incapable of regeneration.

3.8.2.1.8. *Effects considered not to support classification for Category 1 and 2*

It is recognised that effects may be seen which do not justify classification. Such effects in humans and/or animals include, but are not limited to:

- (a) clinical observations or small changes in bodyweight gain, food consumption or water intake that may have some toxicological importance but that do not, by themselves, indicate "significant" toxicity;
- (b) small changes in clinical biochemistry, haematology or urinalysis parameters and/or transient effects, when such changes or effects are of doubtful or minimal toxicological importance;
- (c) changes in organ weights with no evidence of organ dysfunction;
- (d) adaptive responses that are not considered toxicologically relevant;
- (e) substance-induced species-specific mechanisms of toxicity, i.e. demonstrated with reasonable certainty to be not relevant for human health.

3.8.2.1.9. Guidance values to assist with classification based on the results obtained from studies conducted in experimental animals for Category 1 and 2

3.8.2.1.9.1. In order to help reach a decision about whether a substance shall be classified or not, and to what degree it shall be classified (Category 1 or Category 2), dose/concentration "guidance values" are provided for consideration of the dose/concentration which has been shown to produce significant health effects. The

principal argument for proposing such guidance values is that all substances are potentially toxic and there has to be a reasonable dose/concentration above which a degree of toxic effect is acknowledged.

3.8.2.1.9.2. Thus, in animal studies, when significant toxic effects are observed that indicate classification, consideration of the dose/concentration at which these effects were seen, in relation to the suggested guidance values, provides useful information to help assess the need to classify (since the toxic effects are a consequence of the hazardous property(ies) and also the dose/concentration).

3.8.2.1.9.3. The guidance value (C) ranges for single-dose exposure which has produced a significant non-lethal toxic effect are those applicable to acute toxicity testing, as indicated in Table 3.8.2.

Table 3.8.2
Guidance value ranges for single-dose exposures^a

			Guidance value ranges for:	
Route of exposure	Units	Category 1	Category 2	Category 3
Oral (rat)	mg/kg body weight	C • 300	2000 • C > 300	Guidance values do not apply ^b
Dermal (rat or rabbit)	mg/kg body weight	C • 1000	2000 • C > 1000	
Inhalation (rat) gas	ppmV/4h	C • 2500	20000 • C > 2500	
Inhalation (rat) vapour	mg/l/4h	C • 10	20 • C > 10	
Inhalation (rat) dust/mist/fume	mg/l/4h	C • 1,0	5,0 • C > 1,0	

Note:

- (a) The guidance values and ranges mentioned in Table 3.8.2 are intended only for guidance purposes, i.e. to be used as part of the weight of evidence approach, and to assist with decision about classification. They are not intended as strict demarcation values.
- (b) Guidance values are not provided for Category 3 substances since this classification is primarily based on human data. Animal data, if available, shall be included in the weight of evidence evaluation.

3.8.2.1.10. *Other considerations*

- 3.8.2.1.10.1. When a substance is characterised only by use of animal data (typical of new substances, but also true for many existing substances), the classification process includes reference to dose/concentration guidance values as one of the elements that contribute to the weight of evidence approach.
- 3.8.2.1.10.2. When well-substantiated human data are available showing a specific target organ toxic effect that can be reliably attributed to single exposure to a substance, the substance shall normally be classified. Positive human data, regardless of probable dose, predominates over animal data. Thus, if a substance is unclassified because specific target organ toxicity observed was considered not relevant or significant to humans, if subsequent human incident data become available showing a specific target organ toxic effect, the substance shall be classified.
- 3.8.2.1.10.3. A substance that has not been tested for specific target organ toxicity may, where appropriate, be classified on the basis of data from a validated structure activity relationship and expert judgement-based extrapolation from a structural analogue that has previously been classified together with substantial support from consideration of other important factors such as formation of common significant metabolites.
- 3.8.2.1.10.4. Saturated vapour concentration shall be considered, where appropriate, as an additional element to provide for specific health and safety protection

3.8.2.2. *Substances of Category 3: Transient target organ effects*

3.8.2.2.1. *Criteria for respiratory tract irritation*

The criteria for classifying substances as Category 3 for respiratory tract irritation are:

- (a) respiratory irritant effects (characterised by localised redness, oedema, pruritis and/or pain) that impair function with symptoms such as cough, pain, choking, and breathing difficulties are included. This evaluation will be based primarily on human data;

- (b) subjective human observations could be supported by objective measurements of clear respiratory tract irritation (RTI) (such as electrophysiological responses, biomarkers of inflammation in nasal or bronchoalveolar lavage fluids);
- (c) the symptoms observed in humans shall also be typical of those that would be produced in the exposed population rather than being an isolated idiosyncratic reaction or response triggered only in individuals with hypersensitive airways. Ambiguous reports simply of "irritation" shall be excluded as this term is commonly used to describe a wide range of sensations including those such as smell, unpleasant taste, a tickling sensation, and dryness, which are outside the scope of classification for respiratory irritation;
- (d) there are currently no validated animal tests that deal specifically with RTI, however, useful information may be obtained from the single and repeated inhalation toxicity tests. For example, animal studies may provide useful information in terms of clinical signs of toxicity (dyspnoea, rhinitis etc) and histopathology (e.g. hyperemia, edema, minimal inflammation, thickened mucous layer) which are reversible and may be reflective of the characteristic clinical symptoms described above. Such animal studies can be used as part of weight of evidence evaluation;
- (e) this special classification would occur only when more severe organ effects including in the respiratory system are not observed.

3.8.2.2.2 *Criteria for narcotic effects*

The criteria for classifying substances as Category 3 for narcotic effects are:

- (a) central nervous system depression including narcotic effects in humans such as drowsiness, narcosis, reduced alertness, loss of reflexes, lack of coordination, and vertigo are included. These effects can also be manifested as severe headache or nausea, and can lead to reduced judgment, dizziness, irritability, fatigue, impaired memory function, deficits in perception and coordination, reaction time, or sleepiness;

- (b) narcotic effects observed in animal studies may include lethargy, lack of coordination, loss of righting reflex, and ataxia. If these effects are not transient in nature, then they shall be considered to support classification for Category 1 or 2 specific target organ toxicity single exposure.

3.8.3. Classification criteria for mixtures

3.8.3.1. Mixtures are classified using the same criteria as for substances, or alternatively as described below. As with substances, mixtures shall be classified for specific target organ toxicity following single exposure.

3.8.3.2. *Classification of mixtures when data are available for the complete mixture*

3.8.3.2.1. When reliable and good quality evidence from human experience or appropriate studies in experimental animals, as described in the criteria for substances, is available for the mixture, then the mixture shall be classified by weight of evidence evaluation of these data (see 1.1.1.4). Care shall be exercised in evaluating data on mixtures, that the dose, duration, observation or analysis, do not render the results inconclusive.

3.8.3.3. *Classification of mixtures when data are not available for the complete mixture: bridging principles*

3.8.3.3.1. Where the mixture itself has not been tested to determine its specific target organ toxicity, but there are sufficient data on the individual ingredients and similar tested mixtures to adequately characterise the hazards of the mixture, these data shall be used in accordance with the bridging principles set out in section 1.1.3.

3.8.3.4. Classification of mixtures when data are available for all components or only for some components of the mixture

3.8.3.4.1. Where there is no reliable evidence or test data for the specific mixture itself, and the bridging principles cannot be used to enable classification, then classification of the mixture is based on the classification of the ingredient substances. In this case, the mixture shall be classified as a specific target organ toxicant (specific organ specified), following single exposure, when at least one ingredient has been classified as a Category 1 or Category 2 specific target organ toxicant and is present

at or above the appropriate generic concentration limit as mentioned in Table 3.8.3 for Category 1 and 2 respectively.

3.8.3.4.2. These generic concentration limits and consequent classifications shall be applied appropriately to single-dose specific target organ toxicants.

3.8.3.4.3. Mixtures shall be classified for either or both single- and repeated-dose toxicity independently.

Table 3.8.3
Generic concentration limits of ingredients of a mixture
classified as a specific target organ toxicant that trigger
classification of the mixture as Category 1 or 2

Ingredient classified as:	Generic concentration limits triggering classification of the mixture as:	
	Category 1	Category 2
Category 1 Specific Target Organ Toxicant	Concentration $\geq 10\%$	$1,0\% \leq \text{concentration} < 10\%$
Category 2 Specific Target Organ Toxicant		Concentration $\geq 10\%$ [(Note 1)]

Note 1:

If a Category 2 specific target organ toxicant is present in the mixture as an ingredient at a concentration $\geq 1,0\%$ a SDS shall be available for the mixture upon request.

3.8.3.4.4. Care shall be exercised when toxicants affecting more than one organ system are combined that the potentiation or synergistic interactions are considered, because certain substances can cause target organ toxicity at $< 1\%$ concentration when other ingredients in the mixture are known to potentiate its toxic effect.

3.8.3.4.5. Care shall be exercised when extrapolating toxicity of a mixture that contains Category 3 ingredient(s). A generic concentration limit of 20% is appropriate; however, it shall be recognised that this concentration limit may be higher or lower depending on the Category 3 ingredient(s) and that some effects such as respiratory tract irritation may not occur below a certain concentration while other effects such as narcotic effects may occur below this 20% value. Expert judgement shall be




exercised. Respiratory tract irritation and narcotic effects are to be evaluated separately in accordance with the criteria given in 3.8.2.2. When conducting classifications for these hazards, the contribution of each component should be considered additive, unless there is evidence that the effects are not additive.

3.8.4. Hazard Communication

3.8.4.1 Label elements shall be used in accordance with Table 3.8.4., for substances or mixtures meeting the criteria for classification in this hazard class.

Table 3.8.4

Label elements for specific target organ toxicity after single exposure

Classification	Category 1	Category 2	Category 3
GHS Pictograms			
Signal Word	Danger	Warning	Warning
Hazard Statement	H370: Causes damage to organs (or state all organs affected, if known) (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)	H371: May cause damage to organs (or state all organs affected, if known) (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)	H335: May cause respiratory irritation; or H336: May cause drowsiness or dizziness
Precautionary Statement Prevention	P260 P264 P270	P260 P264 P270	P261 P271
Precautionary Statement Response	P307 + P311 P321	P309 + P311	P304 + P340 P312

Precautionary Statement Storage	P405	P405	P403 + P233 P405
Precautionary Statement Disposal	P501	P501	P501

3.9. SPECIFIC TARGET ORGAN TOXICITY – REPEATED EXPOSURE

3.9.1. Definitions and general considerations

- 3.9.1.1. Target organ toxicity (repeated exposure) means specific, target organ toxicity arising from a repeated exposure to a substance or mixture. All significant health effects that can impair function, both reversible and irreversible, immediate and/or delayed are included. However, other specific toxic effects that are specifically addressed in sections 3.1 to 3.8 and 3.10 are not included here.
- 3.9.1.2. Classification for target organ toxicity (repeated exposure) identifies the substance or mixture as being a specific target organ toxicant and, as such, it may present a potential for adverse health effects in people who are exposed to it.
- 3.9.1.3. These adverse health effects include consistent and identifiable toxic effects in humans, or, in experimental animals, toxicologically significant changes which have affected the function or morphology of a tissue/organ, or have produced serious changes to the biochemistry or haematology of the organism and these changes are relevant for human health.
- 3.9.1.4. Assessment shall take into consideration not only significant changes in a single organ or biological system but also generalised changes of a less severe nature involving several organs.
- 3.9.1.5. Specific target organ toxicity can occur by any route that is relevant for humans, i.e. principally oral, dermal or inhalation.
- 3.9.1.6. Non-lethal toxic effects observed after a single-event exposure are classified as described in Specific target organ toxicity – Single exposure (section 3.8) and are therefore excluded from section 3.9.

3.9.2. Classification criteria for substances

3.9.2.1. Substances are classified as specific target organ toxicants following repeated exposure by the use of expert judgement (see 1.1.1), on the basis of the weight of all evidence available, including the use of recommended guidance values which take into account the duration of exposure and the dose/concentration which produced the effect(s), (see 3.9.2.9), and are placed in one of two categories, depending upon the nature and severity of the effect(s) observed (Table 3.9.1).

Table 3.9.1
Categories for specific target organ toxicity-repeated exposure

Categories	Criteria
Category 1	<p>Substances that have produced significant toxicity in humans or that, on the basis of evidence from studies in experimental animals, can be presumed to have the potential to produce significant toxicity in humans following repeated exposure.</p> <p>Substances are classified in Category 1 for target organ toxicity (repeat exposure) on the basis of:</p> <ul style="list-style-type: none">– reliable and good quality evidence from human cases or epidemiological studies; or– observations from appropriate studies in experimental animals in which significant and/or severe toxic effects, of relevance to human health, were produced at generally low exposure concentrations. Guidance dose/concentration values are provided below (see 3.9.2.9), to be used as part of a weight-of-evidence evaluation.
Category 2	<p>Substances that, on the basis of evidence from studies in experimental animals can be presumed to have the potential to be harmful to human health following repeated exposure.</p> <p>Substances are classified in category 2 for target organ toxicity (repeat exposure) on the basis of observations from appropriate studies in experimental animals in which significant toxic effects, of relevance to human health, were produced at generally moderate exposure concentrations. Guidance dose/concentration values are provided below (see 3.9.2.9) in order to help in classification.</p> <p>In exceptional cases human evidence can also be used to place a substance in Category 2 (see 3.9.2.6).</p>

Note:

Attempts shall be made to determine the primary target organ of toxicity and classify for that

purpose, such as hepatotoxicants, neurotoxicants. One shall carefully evaluate the data and, where possible, not include secondary effects (a hepatotoxicant can produce secondary effects in the nervous or gastro-intestinal systems).

3.9.2.2. The relevant route or routes of exposure by which the classified substance produces damage shall be identified.

3.9.2.3. Classification is determined by expert judgement (see section 1.1.1), on the basis of the weight of all evidence available including the guidance presented below.

3.9.2.4. Weight of evidence of all data (see section 1.1.1), including human incidents, epidemiology, and studies conducted in experimental animals, is used to substantiate specific target organ toxic effects that merit classification. This taps the considerable body of industrial toxicology data collected over the years. Evaluation shall be based on all existing data, including peer-reviewed published studies and additional acceptable data.

3.9.2.5. The information required to evaluate specific target organ toxicity comes either from repeated exposure in humans, such as exposure at home, in the workplace or environmentally, or from studies conducted in experimental animals. The standard animal studies in rats or mice that provide this information are 28 day, 90 day or lifetime studies (up to 2 years) that include haematological, clinicochemical and detailed macroscopic and microscopic examination to enable the toxic effects on target tissues/organs to be identified. Data from repeat dose studies performed in other species shall also be used, if available. Other long-term exposure studies, such as on carcinogenicity, neurotoxicity or reproductive toxicity, may also provide evidence of specific target organ toxicity that could be used in the assessment of classification.

3.9.2.6. In exceptional cases, based on expert judgement, it is appropriate to place certain substances with human evidence of specific target organ toxicity in Category 2:

- (a) when the weight of human evidence is not sufficiently convincing to warrant Category 1 classification; and/or
- (b) based on the nature and severity of effects.

Dose/concentration levels in humans shall not be considered in the classification and any available evidence from animal studies shall be consistent with the Category 2

classification. In other words, if there are also animal data available on the substance that warrant Category 1 classification, the substance shall be classified as Category 1.

3.9.2.7. *Effects considered to support classification for specific target organ toxicity following repeated exposure*

3.9.2.7.1. Reliable evidence associating repeated exposure to the substance with a consistent and identifiable toxic effect demonstrates support for the classification.

3.9.2.7.2. Evidence from human experience/incidents is usually restricted to reports of adverse health consequence, often with uncertainty about exposure conditions, and may not provide the scientific detail that can be obtained from well-conducted studies in experimental animals.

3.9.2.7.3. Evidence from appropriate studies in experimental animals can furnish much more detail, in the form of clinical observations, haematology, clinical chemistry, and macroscopic and microscopic pathological examination, and this can often reveal hazards that may not be life-threatening but could indicate functional impairment. Consequently all available evidence, and relevance to human health, shall be taken into consideration in the classification process, including but not limited to the following toxic effects in humans and/or animals:

- (a) morbidity or death resulting from repeated or long-term exposure. Morbidity or death may result from repeated exposure, even to relatively low doses/concentrations, due to bioaccumulation of the substance or its metabolites, and/or due to the overwhelming of the de-toxification process by repeated exposure to the substance or its metabolites;
- (b) significant functional changes in the central or peripheral nervous systems or other organ systems, including signs of central nervous system depression and effects on special senses (e.g. sight, hearing and sense of smell);
- (c) any consistent and significant adverse change in clinical biochemistry, haematology, or urinalysis parameters;
- (d) significant organ damage noted at necropsy and/or subsequently seen or confirmed at microscopic examination;

- (e) multi-focal or diffuse necrosis, fibrosis or granuloma formation in vital organs with regenerative capacity;
- (f) morphological changes that are potentially reversible but provide clear evidence of marked organ dysfunction (e.g., severe fatty change in the liver);
- (g) evidence of appreciable cell death (including cell degeneration and reduced cell number) in vital organs incapable of regeneration.

3.9.2.8. *Effects considered not to support classification for specific target organ toxicity following repeated exposure*

3.9.2.8.1. It is recognised that effects may be seen in humans and/or animals which do not justify classification. Such effects include, but are not limited to:

- (a) clinical observations or small changes in bodyweight gain, food consumption or water intake that have toxicological importance but that do not, by themselves, indicate "significant" toxicity;
- (b) small changes in clinical biochemistry, haematology or urinalysis parameters and/or transient effects, when such changes or effects are of doubtful or minimal toxicological importance;
- (c) changes in organ weights with no evidence of organ dysfunction;
- (d) adaptive responses that are not considered toxicologically relevant;
- (e) substance-induced species-specific mechanisms of toxicity, i.e. demonstrated with reasonable certainty to be not relevant for human health.

3.9.2.9. *Guidance values to assist with classification based on the results obtained from studies conducted in experimental animals*

3.9.2.9.1. In studies conducted in experimental animals, reliance on observation of effects alone, without reference to the duration of experimental exposure and dose/concentration, omits a fundamental concept of toxicology, i.e. all substances are potentially toxic, and what determines the toxicity is a function of the

dose/concentration and the duration of exposure. In most studies conducted in experimental animals the test guidelines use an upper limit dose value.

- 3.9.2.9.2. In order to help reach a decision about whether a substance shall be classified or not, and to what degree it shall be classified (Category 1 or Category 2), dose/concentration "guidance values" are provided for consideration of the dose/concentration which has been shown to produce significant health effects. The principal argument for proposing such guidance values is that all substances are potentially toxic and there has to be a reasonable dose/concentration above which a degree of toxic effect is acknowledged. Also, repeated-dose studies conducted in experimental animals are designed to produce toxicity at the highest dose used in order to optimise the test objective and so most studies will reveal some toxic effect at least at this highest dose. What is therefore to be decided is not only what effects have been produced, but also at what dose/concentration they were produced and how relevant is that for humans.
- 3.9.2.9.3. Thus, in animal studies, when significant toxic effects are observed that indicate classification, consideration of the duration of experimental exposure and the dose/concentration at which these effects were seen, in relation to the suggested guidance values, can provide useful information to help assess the need to classify (since the toxic effects are a consequence of the hazardous property(ies) and also the duration of exposure and the dose/concentration).
- 3.9.2.9.4. The decision to classify at all can be influenced by reference to the dose/concentration guidance values at or below which a significant toxic effect has been observed.
- 3.9.2.9.5. The guidance values refer to effects seen in a standard 90-day toxicity study conducted in rats. They can be used as a basis to extrapolate equivalent guidance values for toxicity studies of greater or lesser duration, using dose/exposure time extrapolation similar to Haber's rule for inhalation, which states essentially that the effective dose is directly proportional to the exposure concentration and the duration of exposure. The assessment shall be done on a case-by-case basis; for a 28-day study the guidance values below is increased by a factor of three.

3.9.2.9.6. Thus classification in Category 1 is applicable, when significant toxic effects observed in a 90-day repeated-dose study conducted in experimental animals are seen to occur at or below the guidance values (C) as indicated in Table 3.9.2:

Table 3.9.2
Guidance values to assist in Category 1 classification

Route of exposure	Units	Guidance values (dose/concentration)
Oral (rat)	mg/kg body weight/day	C • 10
Dermal(rat or rabbit)	mg/kg body weight/day	C • 20
Inhalation (rat)gas	ppmV/6h/day	C • 50
Inhalation (rat)vapour	mg/litre/6h/day	C • 0,2
Inhalation (rat) dust/mist/fume	mg/litre/6h/day	C • 0,02

3.9.2.9.7. Classification in Category 2 is applicable, when significant toxic effects observed in a 90-day repeated-dose study conducted in experimental animals are seen to occur within the guidance value ranges as indicated in Table 3.9.3:

Table 3.9.3
Guidance values to assist in Category 2 classification

Route of Exposure	Units	Guidance Value Ranges: (dose/concentration)
Oral (rat)	mg/kg body weight/day	10 < C • 100
Dermal (rat or rabbit)	mg/kg body weight/day	20 < C • 200
Inhalation (rat) gas	ppmV/6h/day	50 < C • 250
Inhalation (rat)vapour	mg/litre/6h/day	0,2 < C • 1,0
Inhalation (rat) dust/mist/fume	mg/litre/6h/day	0,02 < C • 0,2

3.9.2.9.8. The guidance values and ranges mentioned in paragraphs 3.9.2.9.6 and 3.9.2.9.7 are intended only for guidance purposes, i.e. to be used as part of the weight of evidence

approach, and to assist with decisions about classification. They are not intended as strict demarcation values.

3.9.2.9.9. Thus it is feasible that a specific profile of toxicity occurs in repeat-dose animal studies at a dose/concentration below the guidance value, such as < 100 mg/kg bw/day by the oral route, however the nature of the effect, such as nephrotoxicity seen only in male rats of a particular strain known to be susceptible to this effect may result in the decision not to classify. Conversely, a specific profile of toxicity may be seen in animal studies occurring at above a guidance value, such as • 100 mg/kg bw/day by the oral route, and in addition there is supplementary information from other sources, such as other long-term administration studies, or human case experience, which supports a conclusion that, in view of the weight of evidence, classification is the prudent action to take.

3.9.2.10. *Other considerations*

3.9.2.10.1. When a substance is characterised only by use of animal data (typical of new substances, but also true for many existing substances), the classification process includes reference to dose/concentration guidance values as one of the elements that contribute to the weight of evidence approach.

3.9.2.10.2. When well-substantiated human data are available showing a specific target organ toxic effect that can be reliably attributed to repeated or prolonged exposure to a substance, the substance shall normally be classified. Positive human data, regardless of probable dose, predominates over animal data. Thus, if a substance is unclassified because no specific target organ toxicity was seen at or below the dose/concentration guidance value for animal testing, if subsequent human incident data become available showing a specific target organ toxic effect, the substance shall be classified.

3.9.2.10.3. A substance that has not been tested for specific target organ toxicity may, where appropriate, be classified on the basis of data from a validated structure activity relationship and expert judgement-based extrapolation from a structural analogue that has previously been classified together with substantial support from consideration of other important factors such as formation of common significant metabolites.

3.9.2.10.4. Saturated vapour concentration shall be considered, where appropriate, as an additional element to provide for specific health and safety protection

3.9.3. Classification criteria for mixtures

3.9.3.1. Mixtures are classified using the same criteria as for substances, or alternatively as described below. As with substances, mixtures shall be classified for specific target organ toxicity following repeated exposure.

3.9.3.2. *Classification of mixtures when data are available for the complete mixture*

3.9.3.2.1. When reliable and good quality evidence from human experience or appropriate studies in experimental animals, as described in the criteria for substances, is available for the mixture (see 1.1.1.4), then the mixture shall be classified by weight of evidence evaluation of these data. Care shall be exercised in evaluating data on mixtures, that the dose, duration, observation or analysis, do not render the results inconclusive.

3.9.3.3. Classification of mixtures when data are not available for the complete mixture: bridging principles

3.9.3.3.1. Where the mixture itself has not been tested to determine its specific target organ toxicity, but there are sufficient data on the individual ingredients and similar tested mixtures to adequately characterise the hazards of the mixture, these data shall be used in accordance with the bridging principles set out in section 1.1.3.

3.9.3.4. *Classification of mixtures when data are available for all components or only for some components of the mixture*

3.9.3.4.1. Where there is no reliable evidence or test data for the specific mixture itself, and the bridging principles cannot be used to enable classification, then classification of the mixture is based on the classification of the ingredient substances. In this case, the mixture shall be classified as a specific target organ toxicant (specific organ specified), following single exposure, repeat exposure, or both when at least one ingredient has been classified as a Category 1 or Category 2 specific target organ toxicant and is present at or above the appropriate generic concentration limit as laid out in Table 3.9.4 for Category 1 and 2 respectively.

Table 3.9.4

Generic concentration limits of ingredients of a mixture classified as a specific target organ toxicant that trigger classification of the mixture

Ingredient classified as:	Generic concentration limits triggering classification of the mixture as:	
	Category 1	Category 2
Category 1 Specific Target Organ Toxicant	Concentration $\geq 10\%$	$1,0\% \leq \text{concentration} < 10\%$
Category 2 Specific Target Organ Toxicant		Concentration $\geq 10\%$ [(Note 1)]

Note 1



If a Category 2 specific target organ toxicant is present in the mixture as an ingredient at a concentration $\geq 1,0\%$ a SDS shall be available for the mixture upon request.

- 3.9.3.4.2. These generic concentration limits and consequent classifications apply to repeated-dose target organ toxicants.
- 3.9.3.4.3. Mixtures shall be classified for either or both single- and repeated-dose toxicity independently.
- 3.9.3.4.4. Care shall be exercised when toxicants affecting more than one organ system are combined that the potentiation or synergistic interactions are considered, because certain substances can cause target organ toxicity at $< 1\%$ concentration when other ingredients in the mixture are known to potentiate its toxic effect.

3.9.4. Hazard Communication

- 3.9.4.1. Label elements shall be used in accordance with Table 3.9.5 for substances or mixtures meeting the criteria for classification in this hazard class.

Table 3.9.5**Label elements for specific target organ toxicity after repeated exposure**

Classification	Category 1	Category 2
GHS Pictograms		
Signal word	Danger	Warning
Hazard Statement	H372: Causes damage to organs (state all organs affected, if known) through prolonged or repeated exposure (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)	H373: May cause damage to organs (state all organs affected, if known) through prolonged or repeated exposure (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)
Precautionary Statement Prevention	P260 P264 P270	P260
Precautionary Statement Response	P314	P314
Precautionary Statement Storage		
Precautionary Statement Disposal	P501	P501

3.10. ASPIRATION HAZARD**3.10.1. Definitions and general considerations**

3.10.1.1. These criteria provide a means of classifying substances or mixtures that may pose an aspiration toxicity hazard to humans.

3.10.1.2 "Aspiration" means the entry of a liquid or solid substance or mixture directly

through the oral or nasal cavity, or indirectly from vomiting, into the trachea and lower respiratory system.

- 3.10.1.3. Aspiration toxicity includes severe acute effects such as chemical pneumonia, varying degrees of pulmonary injury or death following aspiration.
- 3.10.1.4. Aspiration is initiated at the moment of inspiration, in the time required to take one breath, as the causative material lodges at the crossroad of the upper respiratory and digestive tracts in the laryngopharyngeal region.
- 3.10.1.5. Aspiration of a substance or mixture can occur as it is vomited following ingestion. This has consequences for labelling, particularly where, due to acute toxicity, a recommendation may be considered to induce vomiting after ingestion. However, if the substance/mixture also presents an aspiration toxicity hazard, the recommendation to induce vomiting shall be modified.

3.10.1.6. Specific considerations

- 3.10.1.6.1. A review of the medical literature on chemical aspiration revealed that some hydrocarbons (petroleum distillates) and certain chlorinated hydrocarbons have been shown to pose an aspiration hazard in humans.
- 3.10.1.6.2. The classification criteria refer to kinematic viscosity. The following provides the conversion between dynamic and kinematic viscosity:

$$\frac{\text{Dynamic viscosity (mPa}\cdot\text{s)}}{\text{Density (g/cm}^3\text{)}} = \text{Kinematic viscosity (mm}^2\text{/s)}$$

- 3.10.1.6.2a Although the definition of aspiration in 3.10.1.2 includes the entry of solids into the respiratory system, classification according to (b) in table 3.10.1 for Category 1 is intended to apply to liquid substances and mixtures only.
- 3.10.1.6.3. Classification of aerosol/mist products

Aerosol and mist forms of a substance or a mixture (product) are usually dispensed in containers such as self-pressurised containers, trigger and pump sprayers. The key to classifying these products is whether a pool of product is formed in the mouth, which then may be aspirated. If the mist or aerosol from a pressurised container is

fine, a pool may not be formed. On the other hand, if a pressurised container dispenses product in a stream, a pool may be formed that may then be aspirated. Usually, the mist produced by trigger and pump sprayers is coarse and therefore, a pool may be formed that then may be aspirated. When the pump mechanism may be removed, and the contents are available to be swallowed then the classification of the substance or mixture shall be considered.

3.10.2. Classification criteria for substances

Table 3.10.1
Hazard category for aspiration toxicity

Category	Criteria
Category 1	<p>Substances known to cause human aspiration toxicity hazards or to be regarded as if they cause human aspiration toxicity hazard</p> <p>A substance is classified in Category 1:</p> <p>(a) based on reliable and good quality human evidence</p> <p>or</p> <p>(b) if it is a hydrocarbon and has a kinematic viscosity of 20,5 mm²/s or less, measured at 40°C.</p>

Note:

Substances in Category 1 include but are not limited to certain hydrocarbons, turpentine and pine oil.

3.10.3. Classification criteria for mixtures

3.10.3.1. *Classification when data are available for the complete mixture*

A mixture is classified in Category 1 based on reliable and good quality human evidence.

3.10.3.2. **Classification when data are not available for the complete mixture: bridging principles**

3.10.3.2.1. Where the mixture itself has not been tested to determine its aspiration toxicity, but there are sufficient data on the individual ingredients and similar tested mixtures to adequately characterise the hazard of the mixture, these data shall be used in accordance with the bridging principles set out in section 1.1.3. However, in the case of application of the dilution bridging principle, the concentration of aspiration toxicant(s) shall be 10 % or more.

3.10.3.3. *Classification when data are available for all components or only some components of the mixture*

3.10.3.3.1. *Category 1*


3.10.3.3.1.1. A mixture which contains a total of 10 % or more of a substance or substances classified in Category 1, and has a kinematic viscosity of 20,5 mm²/s or less, measured at 40°C, shall be classified in Category 1.

3.10.3.3.1.2. In the case of a mixture which separates into two or more distinct layers, one of which contains 10 % or more of a substance or substances classified in Category 1 and has a kinematic viscosity of 20,5 mm²/s or less, measured at 40°C, then the entire mixture is classified in Category 1.

3.10.4. Hazard Communication

3.10.4.1. Label elements shall be used for substances or mixtures meeting the criteria for classification in this hazard class in accordance with Table 3.10.2.

Table 3.10.2
Aspiration toxicity label elements

Classification	Category 1
GHS Pictogram	
Signal Word	Danger
Hazard Statement	H304: May be fatal if swallowed and enters airways
Precautionary Statement Prevention	
Precautionary Statement Response	P301 + P310 P331
Precautionary Statement Storage	P405
Precautionary Statement Disposal	P501

4. PART 4: ENVIRONMENTAL HAZARDS

4.1. HAZARDOUS TO THE AQUATIC ENVIRONMENT

4.1.1. Definitions and General Considerations

4.1.1.1. Definitions

- (a) 'Acute aquatic toxicity' means the intrinsic property of a substance to be injurious to an aquatic organism in a short-term aquatic exposure to that substance.
- (b) 'Acute (short-term) hazard' means for classification purposes the hazard of a substance or mixture caused by its acute toxicity to an organism during short-term aquatic exposure to that substance or mixture.
- (c) 'Availability of a substance' means the extent to which this substance becomes a soluble or disaggregate species. For metal availability, the extent to which the metal ion portion of a metal (M°) compound can disaggregate from the rest of the compound (molecule).
- (d) 'Bioavailability' or 'biological availability' means the extent to which a substance is taken up by an organism, and distributed to an area within the organism. It is dependent upon physico-chemical properties of the substance, anatomy and physiology of the organism, pharmacokinetics, and route of exposure. Availability is not a prerequisite for bioavailability.
- (e) 'Bioaccumulation' means the net result of uptake, transformation and elimination of a substance in an organism due to all routes of exposure (i.e. air, water, sediment/soil and food).
- (f) 'Bioconcentration' means the net result of uptake, transformation and elimination of a substance in an organism due to waterborne exposure.
- (g) 'Chronic aquatic toxicity' means the intrinsic property of a substance to cause adverse effects to aquatic organisms during aquatic exposures which are determined in relation to the life-cycle of the organism.

- (h) 'Degradation' means the decomposition of organic molecules to smaller molecules and eventually to carbon dioxide, water and salts.
- (i) 'EC_x' means the effect concentration associated with x% response.
- (j) 'Long-term hazard' means for classification purposes the hazard of a substance or mixture caused by its chronic toxicity following long-term exposure in the aquatic environment.
- (k) 'No Observed Effect Concentration (NOEC)' means the test concentration immediately below the lowest tested concentration with statistically significant adverse effect. The NOEC has no statistically significant adverse effect compared to the control.

4.1.1.2. *Basic elements*

4.1.1.2.0. Hazardous to the Aquatic Environment is differentiated into:

- Acute aquatic hazard;
- Long-term aquatic hazard.

4.1.1.2.1. The basic elements used for classification for aquatic environmental hazards are:

- Acute aquatic toxicity;
- Chronic aquatic toxicity;
- Potential for or actual bioaccumulation, and
- Degradation (biotic or abiotic) for organic chemicals

4.1.1.2.2. Preferably data shall be derived using the standardised test methods referred to in Article 8(3). In practice data from other standardised test methods such as national methods shall also be used where they are considered as equivalent. Where valid data are available from non-standard testing and from non-testing methods, these shall be considered in classification provided they fulfil the requirements specified in section 1 of Annex XI to Regulation (EC) No 1907/2006. In general, both freshwater and marine species toxicity data are considered suitable for use in classification

provided the test methods used are equivalent. Where such data are not available classification shall be based on the best available data. See also Part 1 of Annex I to Regulation (EC) No 1272/2008.

4.1.1.3. *Other considerations*

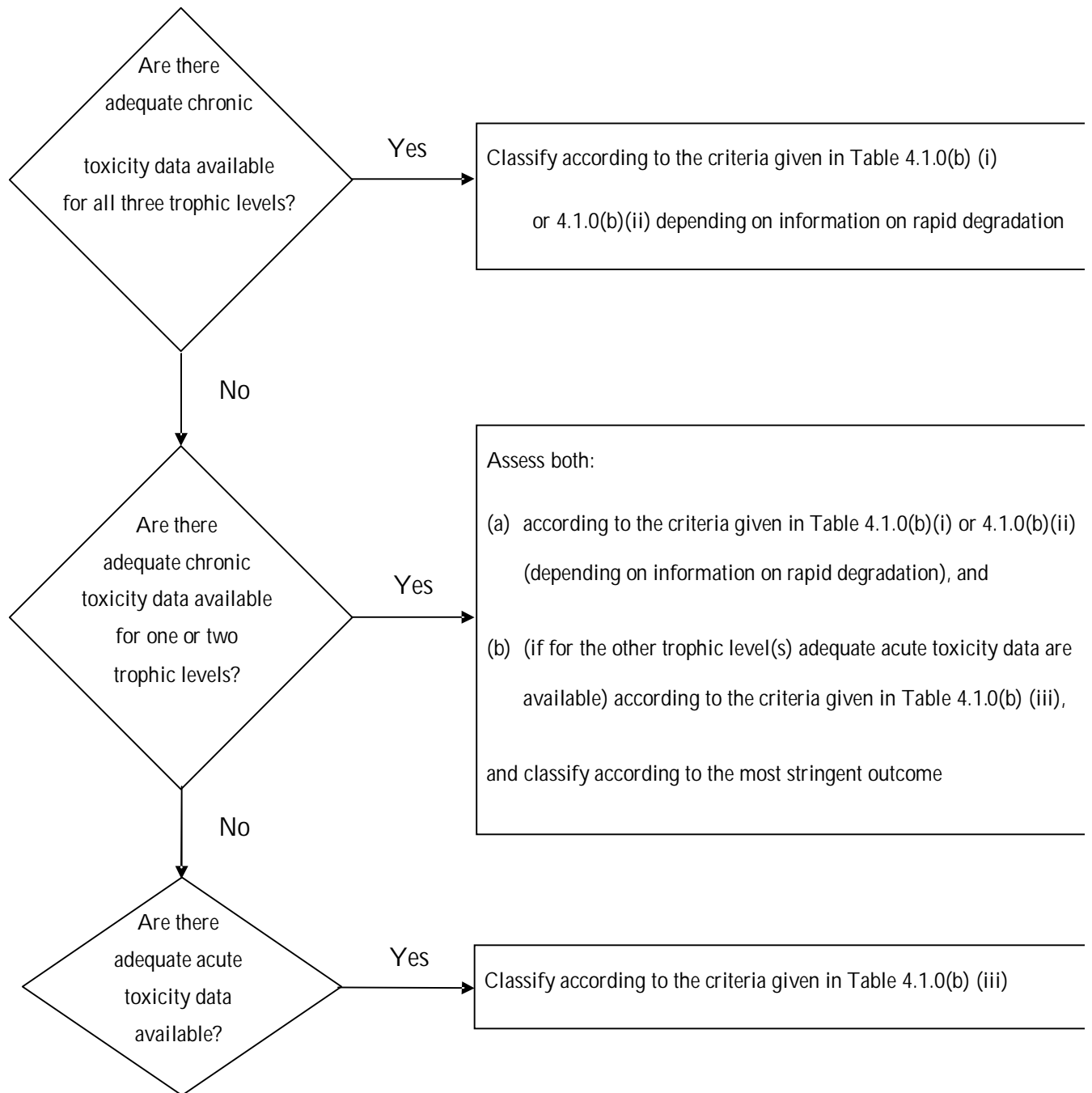
- 4.1.1.3.1. Classification of substances and mixtures for environmental hazards requires the identification of the hazards they present to the aquatic environment. The aquatic environment is considered in terms of the aquatic organisms that live in the water, and the aquatic ecosystem of which they are part. The basis, therefore, of the identification of acute (short-term) and long-term hazards is the aquatic toxicity of the substance or mixture, although this shall be modified by taking account of further information on the degradation and bioaccumulation behaviour, if appropriate.
- 4.1.1.3.2. While the classification system applies to all substances and mixtures, it is recognised that for special cases (e.g. metals) the European Chemicals Agency has issued guidance.

4.1.2. Classification criteria for substances

- 4.1.2.1. The system for classification recognises that the intrinsic hazard to aquatic organisms is represented by both the acute and long-term hazard of a substance. For the long-term hazard, separate hazard categories are defined for both properties representing a gradation in the level of hazard identified. The lowest of the available toxicity values between and within the different trophic levels (fish, crustacean, algae/aquatic plants) shall normally be used to define the appropriate hazard category(ies). There are circumstances, however, when a weight of evidence approach is appropriate.
- 4.1.2.2. The core classification system for substances consists of one acute hazard classification category and three long-term hazard classification categories. The acute and the long-term hazard classification categories are applied independently.
- 4.1.2.3. The criteria for classification of a substance in category Acute 1 are defined on the basis of acute aquatic toxicity data only (EC_{50} or LC_{50}). The criteria for classification of a substance into the categories Chronic 1 to 3 follow a tiered approach where the first step is to see if available information on chronic toxicity merits long-term hazard classification. In absence of adequate chronic toxicity data, the subsequent step is to combine two types of

information, i.e. acute aquatic toxicity data and environmental fate data (degradability and bioaccumulation data) (see figure 4.1.1).

Figure 4.1.1: Categories for substances long-term hazardous to the aquatic environment



- 4.1.2.4. The system also introduces a "safety net" classification (referred to as category Chronic 4) for use when the data available do not allow classification under the formal criteria for acute 1 or chronic 1 to 3 but there are nevertheless some grounds for concern (see example in table 4.1.0).
- 4.1.2.5. Substances with acute toxicities below 1 mg/l or chronic toxicities below 0,1 mg/l (if non-rapidly degradable) and 0,01 mg/l (if rapidly degradable) contribute as components of a mixture to the toxicity of the mixture even at a low concentration and shall normally be given increased weight in applying the summation of classification approach (see note 1 of Table 4.1.0 and 4.1.3.5.5).
- 4.1.2.6. The criteria for classifying and categorising substances as "hazardous to the aquatic environment" are summarised in Table 4.1.0.

Table 4.1.0
Classification categories for hazardous to the aquatic environment

(a) Acute (short-term) aquatic hazard	
<u>Category Acute 1:</u> (Note 1)	
96 hr LC ₅₀ (for fish)	≤1 mg/l and/or
48 hr EC ₅₀ (for crustacea)	≤1 mg/l and/or
72 or 96 hr ErC ₅₀ (for algae or other aquatic plants)	≤1 mg/l. (Note 2)
(b) Long-term aquatic hazard	
(i) Non-rapidly degradable substances (Note 3) for which there are adequate chronic toxicity data available	
<u>Category Chronic 1:</u> (Note 1)	
Chronic NOEC or EC _x (for fish)	≤0,1 mg/l and/or

Chronic NOEC or EC _x (for crustacea)	≤0,1 mg/l and/or
Chronic NOEC or EC _x (for algae or other aquatic plants)	≤0,1 mg/l.
<u>Category Chronic 2:</u>	
Chronic NOEC or EC _x (for fish)	≤1 mg/l and/or
Chronic NOEC or EC _x (for crustacea)	≤1 mg/l and/or
Chronic NOEC or EC _x (for algae or other aquatic plants)	≤1 mg/l.
(ii) Rapidly degradable substances (Note 3) for which there are adequate chronic toxicity data available	
<u>Category Chronic 1:</u> (Note 1)	
Chronic NOEC or EC _x (for fish)	≤0,01 mg/l and/or
Chronic NOEC or EC _x (for crustacea)	≤0,01 mg/l and/or
Chronic NOEC or EC _x (for algae or other aquatic plants)	≤0,01 mg/l.
<u>Category Chronic 2:</u>	
Chronic NOEC or EC _x (for fish)	≤0,1 mg/l and/or
Chronic NOEC or EC _x (for crustacea)	≤0,1 mg/l and/or
Chronic NOEC or EC _x (for algae or other aquatic plants)	≤0,1 mg/l.
<u>Category Chronic 3:</u>	
Chronic NOEC or EC _x (for fish)	≤1 mg/l and/or
Chronic NOEC or EC _x (for crustacea)	≤1 mg/l and/or
Chronic NOEC or EC _x (for algae or other aquatic plants)	≤1 mg/l.
(iii) Substances for which adequate chronic toxicity data are not available	

Category Chronic 1: (Note 1)

96 hr LC ₅₀ (for fish)	≤1 mg/l and/or
48 hr EC ₅₀ (for crustacea)	≤1 mg/l and/or
72 or 96 hr ErC ₅₀ (for algae or other aquatic plants)	≤1 mg/l. (Note 2)

and the substance is not rapidly degradable and/or the experimentally determined BCF • 500
(or, if absent, the log K_{ow} ≥ 4). (Note 3).

Category Chronic 2:

96 hr LC ₅₀ (for fish)	>1 to ≤10 mg/l and/or
48 hr EC ₅₀ (for crustacea)	>1 to ≤10 mg/l and/or
72 or 96 hr ErC ₅₀ (for algae or other aquatic plants)	>1 to ≤10 mg/l (Note 2)

and the substance is not rapidly degradable and/or the experimentally determined BCF • 500
(or, if absent, the log K_{ow} ≥ 4). (Note 3).

Category Chronic 3:

96 hr LC ₅₀ (for fish)	> 10 to ≤ 100 mg/l and/or
48 hr EC ₅₀ (for crustacea)	> 10 to ≤ 100 mg/l and/or
72 or 96 hr ErC ₅₀ (for algae or other aquatic plants)	> 10 to ≤ 100 mg/l. (Note 2)

and the substance is not rapidly degradable and/or the experimentally determined BCF • 500
(or, if absent, the log K_{ow} ≥ 4). (Note 3).

"Safety net" classification

Category Chronic 4

Cases when data do not allow classification under the above criteria but there are nevertheless some grounds for concern. This includes, for example, poorly soluble substances for which no acute toxicity is recorded at levels up to the water solubility (note 4), and which are not rapidly degradable in accordance with section 4.1.2.9.5 and have an experimentally determined BCF • 500 (or, if absent, a log Kow ≥ 4), indicating a potential to bioaccumulate, which will be classified in this category unless other scientific evidence exists showing classification to be unnecessary. Such evidence includes chronic toxicity NOECs > water solubility or > 1 mg/l, or other evidence of rapid degradation in the environment than the ones provided by any of the methods listed in section 4.1.2.9.5.

Note 1

When classifying substances as Acute Category 1 and/or Chronic Category 1 it is necessary at the same time to indicate the appropriate M-factor(s) (see table 4.1.3).

Note 2

Classification shall be based on the ErC₅₀ [= EC₅₀ (growth rate)]. In circumstances where the basis of the EC₅₀ is not specified or no ErC₅₀ is recorded, classification shall be based on the lowest EC₅₀ available.

Note 3

When no useful data on degradability are available, either experimentally determined or estimated data, the substance should be regarded as not rapidly degradable.

Note 4

"No acute toxicity" is taken to mean that the L(E)C₅₀(s) is/are above the water solubility. Also for poorly soluble substances, (water solubility < 1 mg/l), where there is evidence that the acute test does not provide a true measure of the intrinsic toxicity.

4.1.2.7. Aquatic toxicity

4.1.2.7.1. Acute aquatic toxicity is normally determined using a fish 96 hour LC₅₀, a crustacea species 48 hour EC₅₀ and/or an algal species 72 or 96 hour EC₅₀. These species cover a range of trophic levels and taxa and are considered as surrogate for all aquatic

organisms. Data on other species (e.g. *Lemna spp.*) shall also be considered if the test methodology is suitable. The aquatic plant growth inhibition tests are normally considered as chronic tests but the EC₅₀s are treated as acute values for classification purposes (see note 2).

4.1.2.7.2. For determining chronic aquatic toxicity for classification purposes data generated according to the standardised test methods referred to in Article 8 (3) shall be accepted, as well as results obtained from other validated and internationally accepted test methods. The NOECs or other equivalent EC_x (e.g. EC₁₀) shall be used.

4.1.2.8. *Bioaccumulation*

4.1.2.8.1. Bioaccumulation of substances within aquatic organisms can give rise to toxic effects over longer time scales even when actual water concentrations are low. For organic substances the potential for bioaccumulation shall normally be determined by using the octanol/water partition coefficient, usually reported as a log K_{ow}. The relationship between the log K_{ow} of an organic substance and its bioconcentration as measured by the bioconcentration factor (BCF) in fish has considerable scientific literature support. Using a cut-off value of log K_{ow} ≥ 4 is intended to identify only those substances with a real potential to bioconcentrate. While this represents a potential to bioaccumulate, an experimentally determined BCF provides a better measure and shall be used in preference if available. A BCF in fish of • 500 is indicative of the potential to bioconcentrate for classification purposes. Some relationships can be observed between chronic toxicity and bioaccumulation potential, as toxicity is related to the body burden.

4.1.2.9. *Rapid degradability of organic substances*

4.1.2.9.1. Substances that rapidly degrade can be quickly removed from the environment. While effects of such substances can occur, particularly in the event of a spillage or accident, they are localised and of short duration. In the absence of rapid degradation in the environment a substance in the water has the potential to exert toxicity over a wide temporal and spatial scale.

4.1.2.9.2. One way of demonstrating rapid degradation utilises the biodegradation screening tests designed to determine whether an organic substance is "readily biodegradable".

Where such data are not available, a BOD(5 days)/COD ratio $\cdot 0,5$ is considered as indicative of rapid degradation. Thus, a substance which passes this screening test is considered likely to biodegrade "rapidly" in the aquatic environment, and is thus unlikely to be persistent. However, a fail in the screening test does not necessarily mean that the substance will not degrade rapidly in the environment. Other evidence of rapid degradation in the environment may therefore also be considered and are of particular importance where the substances are inhibitory to microbial activity at the concentration levels used in standard testing. Thus, a further classification criterion is included which allows the use of data to show that the substance did actually degrade biotically or abiotically in the aquatic environment by $> 70\%$ in 28 days. Thus, if degradation is demonstrated under environmentally realistic conditions, then the criterion of "rapid degradability" is met.

4.1.2.9.3. Many degradation data are available in the form of degradation half-lives and these can be used in defining rapid degradation provided that ultimate biodegradation of the substance, i.e. full mineralisation, is achieved. Primary biodegradation does not normally suffice in the assessment of rapid degradability unless it can be demonstrated that the degradation products do not fulfil the criteria for classification as hazardous to the aquatic environment.

4.1.2.9.4. The criteria used reflect the fact that environmental degradation may be biotic or abiotic. Hydrolysis can be considered if the hydrolysis products do not fulfil the criteria for classification as hazardous to the aquatic environment.

4.1.2.9.5. Substances are considered rapidly degradable in the environment if one of the following criteria holds true:

- (a) if, in 28-day ready biodegradation studies, at least the following levels of degradation are achieved;
 - (i) tests based on dissolved organic carbon: 70 %
 - (ii) tests based on oxygen depletion or carbon dioxide generation: 60 % of theoretical maximum.

These levels of biodegradation must be achieved within 10 days of the start of degradation which point is taken as the time when 10 % of the substance has

been degraded; unless the substance is identified as an UVCB or as a complex, multi-constituent substance with structurally similar constituents. In this case, and where there is sufficient justification, the 10-day window condition may be waived and the pass level applied at 28 days, or

- (b) if, in those cases where only BOD and COD data are available, when the ratio of BOD5/COD is $\geq 0,5$; or
- (c) if other convincing scientific evidence is available to demonstrate that the substance can be degraded (biotically and/or abiotically) in the aquatic environment to a level $> 70 \%$ within a 28-day period.

4.1.2.10. *Inorganic compounds and metals*

4.1.2.10.1. For inorganic compounds and metals, the concept of degradability as applied to organic compounds has limited or no meaning. Rather, such substances may be transformed by normal environmental processes to either increase or decrease the bioavailability of the toxic species. Equally the use of bioaccumulation data shall be treated with care¹.

4.1.2.10.2. Poorly soluble inorganic compounds and metals may be acutely or chronically toxic in the aquatic environment depending on the intrinsic toxicity of the bioavailable inorganic species and the rate and amount of this species which enter solution. All evidence must be weighed in a classification decision. This would be especially true for metals showing borderline results in the Transformation/Dissolution Protocol.

4.1.3. *Classification criteria for mixtures*

4.1.3.1. The classification system for mixtures covers all classification categories which are used for substances, i.e. [categories](#) Acute 1 and Chronic 1 to 4. In order to make use of all available data for purposes of classifying the aquatic environmental hazards of the mixture, the following is applied where appropriate:

¹ Specific guidance has been issued by the European Chemicals Agency on how these data for such substances may be used in meeting the requirements of the classification criteria.

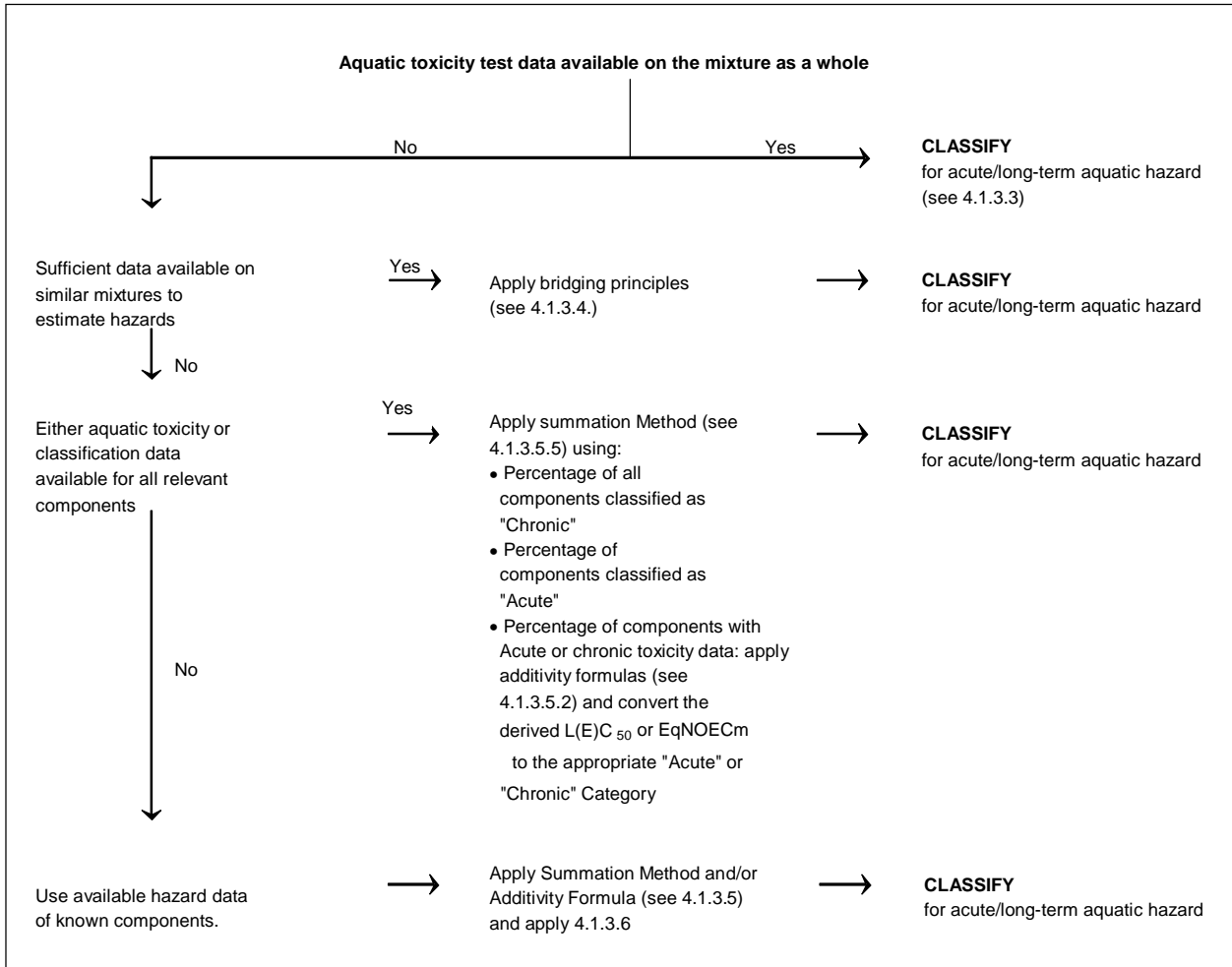
The "relevant components" of a mixture are those which are classified "Acute 1" or "Chronic 1" and present in a concentration of 0,1 % (w/w) or greater, and those which are classified "Chronic 2", "Chronic 3" or "Chronic 4" and present in a concentration of 1 % (w/w) or greater, unless there is a presumption (such as in the case of highly toxic components (see 4.1.3.5.5.5)) that a component present in a lower concentration can still be relevant for classifying the mixture for aquatic environmental hazards. Generally, for substances classified as "Acute 1" or "Chronic 1" the concentration to be taken into account is (0,1/M) %. (For explanation M-factor see section 4.1.3.5.5.5).

4.1.3.2. The approach for classification of aquatic environmental hazards is tiered, and is dependent upon the type of information available for the mixture itself and for its components. Figure 4.1.2 outlines the process to be followed.

Elements of the tiered approach include:

- classification based on tested mixtures;
- classification based on bridging principles;
- the use of "summation of classified components" and/or an "additivity formula".

Figure 4.1.2
Tiered approach to classification of mixtures
for acute and long-term aquatic environmental hazards



4.1.3.3. Classification of mixtures when toxicity data are available for the complete mixture

4.1.3.3.1. When the mixture as a whole has been tested to determine its aquatic toxicity, this information can be used for classifying the mixture according to the criteria that have been agreed for substances. The classification is normally based on the data for fish, crustacea and algae/plants (see sections 4.1.2.7.1 and 4.1.2.7.2). When adequate acute or chronic toxicity data for the mixture as a whole are lacking, "bridging principles" or "summation method" should be applied (see sections 4.1.3.4 and 4.1.3.5).

4.1.3.3.2. The long-term hazard classification of mixtures requires additional information on degradability and in certain cases bioaccumulation. Degradability and bioaccumulation tests for mixtures are not used as they are usually difficult to interpret, and such tests may be meaningful only for single substances.

4.1.3.3.3. Classification for category Acute 1

- (a) When there are adequate acute toxicity test data (LC_{50} or EC_{50}) available for the mixture as a whole showing $L(E)C_{50} \leq 1$ mg/l:

Classify mixture as Acute 1 in accordance with point (a) of Table 4.1.0.

- (b) When there are acute toxicity test data ($LC_{50}(s)$ or $EC_{50}(s)$) available for the mixture as a whole showing $L(E)C_{50}(s) > 1$ mg/l for normally all trophic levels:

No need to classify for acute hazard.

4.1.3.3.4. Classification for categories Chronic 1, 2 and 3

- (a) When there are adequate chronic toxicity data (EC_x or NOEC) available for the mixture as a whole showing EC_x or NOEC of the tested mixture $\bullet 1$ mg/l:
- (i) Classify the mixture as Chronic 1, 2 or 3 in accordance with point (b)(ii) of Table 4.1.0. as rapidly degradable if the available information allows the conclusion that all relevant components of the mixture are rapidly degradable;

- (ii) Classify the mixture as Chronic 1 or 2 in all other cases in accordance with point (b)(i) of Table 4.1.0. as non-rapidly degradable;
- (b) When there are adequate chronic toxicity data (EC_x or NOEC) available for the mixture as a whole showing EC_x(s) or NOEC(s) of the tested mixture > 1 mg/l for normally all trophic levels:

No need to classify for long-term hazard in categories Chronic 1, 2 or 3.

4.1.3.3.5 *Classification for category Chronic 4*

If there are nevertheless reasons for concern:

Classify the mixture as Chronic 4 (safety net classification) in accordance with Table 4.1.0.

4.1.3.4. Classification of mixtures when toxicity data are not available for the complete mixture: Bridging principles

4.1.3.4.1. Where the mixture itself has not been tested to determine its aquatic environmental hazard, but there are sufficient data on the individual components and similar tested mixtures to adequately characterise the hazards of the mixture, this data shall be used in accordance with the bridging rules set out in section 1.1.3. However, in relation to application of the bridging rule for dilution, sections 4.1.3.4.2 and 4.1.3.4.3 shall be used.

4.1.3.4.2. Dilution: if a mixture is formed by diluting another tested mixture or a substance classified for its aquatic environmental hazard with a diluent which has an equivalent or lower aquatic hazard classification than the least toxic original component and which is not expected to affect the aquatic hazards of other components, then the resulting mixture may be classified as equivalent to the original tested mixture or substance. Alternatively, the method explained in section 4.1.3.5 may be applied.

4.1.3.4.3. If a mixture is formed by diluting another classified mixture or substance with water or other totally non-toxic material, the toxicity of the mixture can be calculated from the original mixture or substance.

4.1.3.5. Classification of mixtures when toxicity data are available for some or all components of the mixture

4.1.3.5.1. The classification of a mixture is based on summation of the concentration of its classified components. The percentage of components classified as "Acute" or "Chronic" is fed straight in to the summation method. Details of the summation method are described in 4.1.3.5.5.

4.1.3.5.2. Mixtures can be made of a combination of both components that are classified (as Acute 1 and/or Chronic 1, 2, 3, 4) and others for which adequate toxicity test data is available. When adequate toxicity data are available for more than one component in the mixture, the combined toxicity of those components is calculated using the following additivity formulas (a) or (b), depending on the nature of the toxicity data:

(a) Based on acute aquatic toxicity:

$$\frac{\sum C_i}{L(E)C_{50m}} = \sum_{\eta} \frac{C_i}{L(E)C_{50i}}$$

where:

C_i = concentration of component i (weight percentage)

$L(E)C_{50i}$ = (mg/l) LC_{50} or EC_{50} for component i

η = number of components

$L(E)C_{50m}$ = $L(E)C_{50}$ of the part of the mixture with test data

The calculated toxicity may be used to assign that portion of the mixture an acute hazard category which is then subsequently used in applying the summation method;

(b) Based on chronic aquatic toxicity:

$$\frac{\sum C_i + \sum C_j}{EqNOEC_m} = \sum_n \frac{C_i}{NOEC_i} + \sum_n \frac{C_j}{0.1 \times NOEC_j}$$

where:

- C_i = concentration of component i (weight percentage) covering the rapidly degradable components;
- C_j = concentration of component j (weight percentage) covering the non- rapidly degradable components;
- $NOEC_i$ = NOEC (or other recognised measures for chronic toxicity) for component i covering the rapidly degradable components, in mg/l;
- $NOEC_j$ = NOEC (or other recognised measures for chronic toxicity) for component j covering the non-rapidly degradable components, in mg/l;
- n = number of components, and i and j are running from 1 to n;
- $EqNOEC_m$ = Equivalent NOEC of the part of the mixture with test data;

The equivalent toxicity thus reflects the fact that non-rapidly degrading substances are classified one hazard category level more “severe” than rapidly degrading substances.

The calculated equivalent toxicity may be used to assign that portion of the mixture a long-term hazard category, in accordance with the criteria for rapidly degradable substances (point (b)(ii) of Table 4.1.0.), which is then subsequently used in applying the summation method.

- 4.1.3.5.3. When applying the additivity formula for part of the mixture, it is preferable to calculate the toxicity of this part of the mixture using for each substance toxicity values that relate to the same taxonomic group (i.e. fish, crustacean, algae or equivalent) and then to use the highest toxicity (lowest value) obtained (i.e. use the most sensitive of the three taxonomic groups). However, when toxicity data for each component are not available in the same taxonomic group, the toxicity value of each component is selected in the same manner that toxicity values are selected for the

classification of substances, i.e. the higher toxicity (from the most sensitive test organism) is used. The calculated acute and chronic toxicity is then used to assess whether this part of the mixture shall be classified as Acute 1 and/or Chronic 1, 2 or 3 using the same criteria described for substances.

4.1.3.5.4. If a mixture is classified in more than one way, the method yielding the more conservative result shall be used.

4.1.3.5.5. *Summation method*

4.1.3.5.5.1. *Rationale*

4.1.3.5.5.1.1. In case of the substance classification categories Chronic 1 to Chronic 3, the underlying toxicity criteria differ by a factor of 10 in moving from one category to another. Substances with a classification in a high toxicity band therefore contribute to the classification of a mixture in a lower band. The calculation of these classification categories therefore needs to consider the contribution of any substance classified as Acute 1, Chronic 1, 2 or 3.

4.1.3.5.5.1.2. When a mixture contains components classified as Acute 1 or Chronic 1, attention must be paid to the fact that such components, when their acute toxicity is below 1 mg/l and/or chronic toxicity is below 0,1 mg/l (if non rapidly degradable) and 0,01 mg/l (if rapidly degradable) contribute to the toxicity of the mixture even at a low concentration. Active ingredients in pesticides often possess such high aquatic toxicity but also some other substances like organometallic compounds. Under these circumstances the application of the normal generic concentration limits leads to an "under-classification" of the mixture. Therefore, multiplying factors shall be applied to account for highly toxic components, as described in paragraph 4.1.3.5.5.5.

4.1.3.5.5.2. *Classification procedure*

4.1.3.5.5.2.1. In general a more severe classification for mixtures overrides a less severe classification, e.g. a classification with Chronic 1 overrides a classification with Chronic 2. As a consequence, in this example, the classification procedure is already completed if the result of the classification is Chronic 1. A more severe classification than Chronic 1 is not possible. Therefore it is not necessary to undergo the further classification procedure.

4.1.3.5.5.3. *Classification for category Acute 1*

4.1.3.5.5.3.1. First all components classified as Acute 1 are considered. If the sum of the concentrations (in %) of these components multiplied by their corresponding M-factors is greater than 25 %, the whole mixture is classified as Acute 1.

4.1.3.5.5.3.2. The classification of mixtures for acute hazards based on this summation of classified components is summarised in Table 4.1.1.

Table 4.1.1
Classification of a mixture for acute hazards,
based on summation of classified components

Sum of components classified as:	Mixture is classified as:
Acute 1 x M ^a • 25 %	Acute 1

^a For explanation of the M-factor, see 4.1.3.5.5.5

4.1.3.5.5.4. *Classification for the categories Chronic 1, 2, 3 and 4*

4.1.3.5.5.4.1. First all components classified as Chronic 1 are considered. If the sum of the concentrations (in %) of these components multiplied by their corresponding M-factors is equal to or greater than 25 %, the mixture is classified as Chronic 1. If the result of the calculation is a classification of the mixture as Chronic 1, the classification procedure is completed.

4.1.3.5.5.4.2. In cases where the mixture is not classified as Chronic 1, classification of the mixture as Chronic 2 is considered. A mixture is classified as Chronic 2 if 10 times the sum of the concentrations (in %) of all components classified as Chronic 1 multiplied by their corresponding M-factors plus the sum of the concentrations (in %) of all components classified as Chronic 2 is equal to or greater than 25 %. If the result of the calculation is classification of the mixture as Chronic 2, the classification process is completed.

4.1.3.5.5.4.3. In cases where the mixture is not classified either as Chronic 1 or Chronic 2, classification of the mixture as Chronic 3 is considered. A mixture is classified as Chronic 3 if 100 times the sum of the concentrations (in %) of all components classified as Chronic 1 multiplied by their corresponding M-factors plus 10 times the

sum of the concentrations (in %) of all components classified with Chronic 2 plus the sum of the concentrations (in %) of all components classified as Chronic 3 is • 25 %.

4.1.3.5.4.4. If the mixture is still not classified in Chronic 1, 2 or 3, classification of the mixture as Chronic 4 shall be considered. A mixture is classified as Chronic 4 if the sum of the concentrations (in %) of components classified as Chronic 1, 2, 3 and 4 is equal to or greater than 25 %.

4.1.3.5.4.5. The classification of mixtures for long-term hazards, based on this summation of the concentrations of classified components, is summarised in Table 4.1.2.

Table 4.1.2
Classification of a mixture for long-term hazards,
based on summation of the concentrations of classified components

Sum of components classified as:	Mixture is classified as:
Chronic 1 x M ^a • 25 %	Chronic 1
(M x 10 x Chronic 1) + Chronic 2 • 25 %	Chronic 2
(M x 100 x Chronic 1) + (10 x Chronic 2) + Chronic 3 • 25 %	Chronic 3
Chronic 1 + Chronic 2 + Chronic 3 + Chronic 4 • 25 %	Chronic 4

^a For explanation of the M-factor, see 4.1.3.5.5.5

4.1.3.5.5.5. *Mixtures with highly toxic components*

4.1.3.5.5.5.1. Acute 1 and Chronic 1 components with toxicities below 1 mg/l and/or chronic toxicities below 0,1 mg/l (if non-rapidly degradable) and 0,01 mg/l (if rapidly degradable) contribute to the toxicity of the mixture even at a low concentration and shall normally be given increased weight in applying the summation of classification approach. When a mixture contains components classified as Acute or Chronic 1, one of the following shall be applied:

- The tiered approach described in sections 4.1.3.5.5.3 and 4.1.3.5.5.4 using a weighted sum by multiplying the concentrations of Acute 1 and Chronic 1 components by a factor, instead of merely adding up the percentages. This

means that the concentration of "Acute 1" in the left column of Table 4.1.1 and the concentration of "Chronic 1" in the left column of Table 4.1.2 are multiplied by the appropriate multiplying factor. The multiplying factors to be applied to these components are defined using the toxicity value, as summarised in Table 4.1.3. Therefore, in order to classify a mixture containing Acute/Chronic 1 components, the classifier needs to be informed of the value of the M-factor in order to apply the summation method;

- The additivity formula (see section 4.1.3.5.2) provided that toxicity data are available for all highly toxic components in the mixture and there is convincing evidence that all other components, including those for which specific acute and/or chronic toxicity data are not available, are of low or no toxicity and do not significantly contribute to the environmental hazard of the mixture.

Table 4.1.3
Multiplying factors for highly toxic components of mixtures

Acute toxicity	M factor	Chronic toxicity	M factor	
L(E)C₅₀ value		NOEC value	NRD^a	RD^b
			components	components
0,1 < L(E)C ₅₀ • 1	1	0,01 < NOEC • 0,1	1	-
0,01 < L(E)C ₅₀ ≤ 0,1	10	0,001 < NOEC • 0,01	10	1
0,001 < L(E)C ₅₀ ≤ 0,01	100	0,0001 < NOEC • 0,001	100	10
0,0001 < L(E)C ₅₀ ≤ 0,001	1000	0,00001 < NOEC • 0,0001	1000	100
0,00001 < L(E)C ₅₀ ≤ 0,0001	10000	0,000001 < NOEC • 0,00001	10000	1000
(continue in factor 10 intervals)		(continue in factor 10 intervals)		

^a *Non-rapidly degradable*

^b *Rapidly degradable*

4.1.3.6. Classification of mixtures with components without any useable information


4.1.3.6.1. In the event that no useable information on acute and/or long-term aquatic hazard is available for one or more relevant components, it is concluded that the mixture



cannot be attributed to one or more definitive hazard category(ies). In this situation the mixture shall be classified based on the known components only, with the additional statement on the label and in the SDS that: "Contains x % of components with unknown hazards to the aquatic environment".

4.1.4. Hazard Communication

4.1.4.1. Label elements shall be used for substances or mixtures meeting the criteria for classification in this hazard class in accordance with Table 4.1.4.

Table 4.1.4
Label elements for hazardous to the aquatic environment

ACUTE AQUATIC HAZARD	
	Acute 1
GHS Pictogram	
Signal Word	Warning
Hazard Statement	H400: Very toxic to aquatic life
Precautionary Statement Prevention	P273
Precautionary Statement Response	P391
Precautionary Statement Storage	
Precautionary Statement Disposal	P501

LONG-TERM AQUATIC HAZARD				
	Chronic 1	Chronic 2	Chronic 3	Chronic 4
GHS Pictograms			No pictogram is used	No pictogram is used
Signal Word	Warning	No signal word is used	No signal word is used	No signal word is used
Hazard Statement	H410: Very toxic to aquatic life with long lasting effects	H411: Toxic to aquatic life with long lasting effects	H412: Harmful to aquatic life with long lasting effects	H413: May cause long lasting harmful effects to aquatic life
Precautionary Statement Prevention	P273	P273	P273	P273
Precautionary Statement Response	P391	P391		
Precautionary Statement Storage				
Precautionary Statement Disposal	P501	P501	P501	P501

5. PART 5: ADDITIONAL HAZARDS

5.1. HAZARDOUS TO THE OZONE LAYER

5.1.1. Definitions and general considerations

5.1.1.1. Ozone depleting potential (ODP) is an integrative quantity, distinct for each halocarbon source species, that represents the extent of ozone depletion in the stratosphere expected from the halocarbon on a mass-for-mass basis relative to CFC-11. The formal definition of ODP is the ratio of integrated perturbations to total ozone, for a differential mass emission of a particular compound relative to an equal emission of CFC-11.

Substance Hazardous to the Ozone Layer means a substance which, on the basis of the available evidence concerning its properties and its predicted or observed environmental fate and behaviour may present a danger to the structure and/or the functioning of the stratospheric ozone layer. This includes substances which are listed in Annex I to Regulation (EC) No 1005/2009 of the European Parliament and of the Council of 16 September 2009 on substances that deplete the ozone layer¹.

5.1.2. Classification criteria for substances

5.1.2.1. A substance shall be classified as Hazardous to the Ozone Layer (Category 1) if the available evidence concerning its properties and its predicted or observed environmental fate and behaviour indicate that it may present a danger to the structure and/or the functioning of the stratospheric ozone layer.

5.1.3. Classification criteria for mixtures

5.1.3.1. Mixtures shall be classified as Hazardous to the Ozone Layer (Category 1) on the basis of the individual concentration of the substance(s) contained therein that are also classified as Hazardous to the Ozone Layer (Category 1), in accordance with Table 5.1.

¹ OJ L 286, 31.10.2009, p. 1.

Table 5.1

Generic concentration limits for substances (in a mixture), classified as Hazardous to the Ozone Layer (Category 1), that trigger classification of the mixture as Hazardous to the Ozone Layer (Category 1)


Classification of the substance	Classification of the mixture
Hazardous to the ozone layer (Category 1)	$C \geq 0,1 \%$

5.1.4. Hazard Communication

5.1.4.1. Label elements shall be used for substances or mixtures meeting the criteria for classification in this hazard class in accordance with Table 5.2

Table 5.2

Label elements for Hazardous to the Ozone Layer

Symbol/pictogram	
Signal Word	Warning
Hazard Statement	H420: Harms public health and the environment by destroying ozone in the upper atmosphere
Precautionary Statements	P502

ANNEX II

Special rules for labelling and packaging of certain substances and mixtures

This Annex consists of 5 parts:

- Part 1 contains special rules for the labelling of certain classified substances and mixtures.
- Part 2 sets out rules for additional hazard statements to be included on the label of certain mixtures.
- Part 3 sets out special rules for packaging.
- Part 4 sets out a special rule for the labelling of plant protection products.
- Part 5 sets up a list of hazardous substances and mixtures to which Article 29(3) applies.

1. PART 1: SUPPLEMENTAL HAZARD INFORMATION

The statements set out in sections 1.1 and 1.2 shall be assigned in accordance with Article 25(1) to substances and mixtures classified for physical, health or environmental hazards.

1.1. PHYSICAL PROPERTIES

1.1.1. EUH001 – "Explosive when dry"

For explosive substances and mixtures as referred to in section 2.1 of Annex I, placed on the market wetted with water or alcohols or diluted with other substances to suppress their explosive properties.

1.1.2. EUH006 – "Explosive with or without contact with air"

For substances and mixtures which are unstable at ambient temperatures, such as acetylene.

1.1.3. EUH014 – "Reacts violently with water"

For substances and mixtures which react violently with water, such as acetyl chloride, alkali metals, titanium tetrachloride.

1.1.4. EUH018 – "In use, may form flammable/explosive vapour-air mixture"

For substances and mixtures not classified as flammable themselves, which may form flammable/explosive vapour-air mixtures. For substances this might be the case for halogenated hydrocarbons and for mixtures this might be the case due to a volatile flammable component or due to the loss of a volatile non-flammable component.

1.1.5. EUH019 – "May form explosive peroxides"

For substances and mixtures which may form explosive peroxides during storage, such as diethyl ether, 1,4-dioxane.

1.1.6. EUH044 – "Risk of explosion if heated under confinement"

For substances and mixtures not in themselves classified as explosive in accordance with section 2.1 of Annex I, but which may nevertheless display explosive properties in practice if heated under sufficient confinement. In particular, substances which decompose explosively if heated in a steel drum do not show this effect if heated in less-strong containers.

1.2. HEALTH PROPERTIES

1.2.1. EUH029 – "Contact with water liberates toxic gas"

For substances and mixtures which in contact with water or damp air, evolve gases classified for acute toxicity in category 1, 2 or 3 in potentially dangerous amounts, such as aluminium phosphide, phosphorus pentasulphide.

1.2.2. EUH031 – "Contact with acids liberates toxic gas"

For substances and mixtures which react with acids to evolve gases classified for acute toxicity in category 3 in dangerous amounts, such as sodium hypochlorite, barium polysulphide.

1.2.3. EUH032 – "Contact with acids liberates very toxic gas"

For substances and mixtures which react with acids to evolve gases classified for acute toxicity in category 1 or 2 in dangerous amounts, such as salts of hydrogen cyanide, sodium azide.

1.2.4. EUH066 – "Repeated exposure may cause skin dryness or cracking"

For substances and mixtures which may cause concern as a result of skin dryness, flaking or cracking but which do not meet the criteria for skin irritancy in section 3.2 of Annex I, based on either:

- practical observations; or
- relevant evidence concerning their predicted effects on the skin.

1.2.5. EUH070 – "Toxic by eye contact"

For substances or mixtures where an eye irritation test has resulted in overt signs of systemic toxicity or mortality among the animals tested, which is likely to be attributed to absorption of the substance or mixture through the mucous membranes of the eye. The statement shall also be applied if there is evidence in humans for systemic toxicity after eye contact.

The statement shall also be applied where a substance or a mixture contains another substance labelled for this effect, if the concentration of this substance is equal to, or greater than 0,1%, unless otherwise specified in part 3 of Annex VI.

1.2.6. EUH071 – "Corrosive to the respiratory tract"

For substances and mixtures in addition to classification for inhalation toxicity, if data are available that indicate that the mechanism of toxicity is corrosivity, in accordance with section 3.1.2.3.3 and Note 1 of Table 3.1.3 in Annex I.

For substances and mixtures in addition to classification for skin corrosivity, if no acute inhalation test data are available and which may be inhaled.

2. PART 2: SPECIAL RULES FOR SUPPLEMENTAL LABEL ELEMENTS FOR CERTAIN MIXTURES

The statements set out in sections 2.1 to 2.10 shall be assigned to mixtures in accordance with Article 25(6).

2.1. MIXTURES CONTAINING LEAD

The label on the packaging of paints and varnishes containing lead in quantities exceeding 0,15 % (expressed as weight of metal) of the total weight of the mixture, as determined in accordance with ISO standard 6503, shall bear the following statement:

EUH201 – "Contains lead. Should not be used on surfaces liable to be chewed or sucked by children"

In the case of packages the contents of which are less than 125 ml, the statement may be as follows:

EUH201A – "Warning! Contains lead"

2.2. MIXTURES CONTAINING CYANOACRYLATES

The label on the immediate packaging of adhesives based on cyanoacrylate shall bear the following statement:

EUH202 – "Cyanoacrylate. Danger. Bonds skin and eyes in seconds. Keep out of the reach of children"

Appropriate advice on safety shall accompany the package.

2.3. CEMENTS AND CEMENT MIXTURES

Unless cements or cement mixtures are already classified and labelled as a sensitiser with the hazard statement H317, "May cause an allergic skin reaction", the label on the packaging of cements and cement mixtures that contain, when they are hydrated, more than 0,0002 % soluble chromium (VI) of the total dry weight of the cement shall bear the statement:

EUH203 – "Contains chromium (VI). May produce an allergic reaction"

If reducing agents are used, then the packaging of cement or cement-containing mixtures shall include information on the packing date, the storage conditions and the storage period appropriate to maintaining the activity of the reducing agent and to keeping the content of soluble chromium VI below 0,0002 %.

2.4. MIXTURES CONTAINING ISOCYANATES

Unless already identified on the label of the packaging, mixtures containing isocyanates (as monomers, oligomers, prepolymers, etc., or as mixtures thereof) shall bear the following statement:

EUH204 – "Contains isocyanates. May produce an allergic reaction."

2.5. MIXTURES CONTAINING EPOXY CONSTITUENTS WITH AN AVERAGE MOLECULAR WEIGHT • 700

Unless already identified on the label of the packaging, mixtures containing epoxy constituents with an average molecular weight • 700 shall bear the following statement:

EUH205 – "Contains epoxy constituents. May produce an allergic reaction."

2.6. MIXTURES SOLD TO THE GENERAL PUBLIC WHICH CONTAIN ACTIVE CHLORINE

The label on the packaging of mixtures containing more than 1 % of active chlorine shall bear the following statement:

EUH206 – "Warning! Do not use together with other products. May release dangerous gases (chlorine)"

2.7. MIXTURES CONTAINING CADMIUM (ALLOYS) AND INTENDED TO BE USED FOR BRAZING OR SOLDERING

The label on the packaging of the above mentioned mixtures shall bear the following statement:

EUH207 – "Warning! Contains cadmium. Dangerous fumes are formed during use. See information supplied by the manufacturer. Comply with the safety instructions"

2.8. MIXTURES CONTAINING AT LEAST ONE SENSITISING SUBSTANCE

The label on the packaging of mixtures not classified as sensitising but containing at least one substance classified as sensitising and present in a concentration equal to or greater than that specified in Table 3.4.6 of Annex I shall bear the statement:

EUH208 – "Contains (name of sensitising substance). May produce an allergic reaction".

Mixtures classified as sensitising containing other substance(s) classified as sensitising (in addition to the one that leads to the classification of the mixture) and present in a concentration equal to or greater than that specified in Table 3.4.6 of Annex I shall bear the name(s) of that/those substance(s) on the label.

2.9. LIQUID MIXTURES CONTAINING HALOGENATED HYDROCARBONS

For liquid mixtures which show no flashpoint or a flashpoint higher than 60 °C but not more than 93°C and contain a halogenated hydrocarbon and more than 5 % highly flammable or flammable substances, the label on the packaging shall bear one of the following statements, depending on whether the substances referred to above are highly flammable or flammable:

EUH209 – "Can become highly flammable in use" or

EUH209A – "Can become flammable in use"

2.10. MIXTURES NOT INTENDED FOR THE GENERAL PUBLIC

For mixtures not classified as hazardous but which contain:

- • 0,1 % of a substance classified as skin sensitiser category 1, 1B, respiratory sensitiser category 1, 1B, or carcinogenic category 2; or
- • 0,01% of a substance classified as skin sensitiser category 1A, respiratory sensitiser category 1A; or
- • one tenth of the specific concentration limit for a substance classified as skin sensitiser or respiratory sensitiser with specific concentration limit lower than 0,1%; or
- • 01 % of a substance classified as toxic to reproduction categories 1A, 1B or 2, or with effects on or via lactation; or
- at least one substance in an individual concentration of • 1 % by weight for non-gaseous mixtures and • 0,2 % by volume for gaseous mixtures either:

- classified with other health or environmental hazards; or
- for which there are Community workplace exposure limits

the label on the packaging shall bear the statement:

EUH210 – "Safety data sheet available on request".

2.11 AEROSOLS

Note that aerosols are also subject to the labelling provisions in accordance with points 2.2 and 2.3 in the Annex to Directive 75/324/EEC.

3. PART 3: SPECIAL RULES ON PACKAGING

3.1. PROVISIONS RELATING TO CHILD-RESISTANT FASTENINGS

3.1.1. Packaging to be fitted with child-resistant fastenings

- 3.1.1.1. Packaging of whatever capacity containing a substance or mixture supplied to the general public and classified for acute toxicity, categories 1 to 3, STOT – single exposure category 1, STOT – repeated exposure category 1, or skin corrosion category 1 shall be fitted with child-resistant fastenings.
- 3.1.1.2. Packaging of whatever capacity containing a substance or mixture supplied to the general public presenting an aspiration hazard and classified according to sections 3.10.2 and 3.10.3 of Annex I and labelled according to section 3.10.4.1 of Annex I, with the exception of substances and mixtures placed on the market in the form of aerosols or in a container fitted with a sealed spray attachment, shall be fitted with child-resistant fastenings.
- 3.1.1.3 Where a substances or mixture has at least one of the substances mentioned below present in a concentration equal to or greater than the maximum individual concentrations specified, which are supplied to the general public, the packaging of whatever capacity shall be fitted with child-resistant fastenings.

No.	Identification of the substance			Concentration limit
	CAS No.	Name	EC No.	
1	67-56-1	methanol	200-659-6	≥ 3 %
2	75-09-2	dichloromethane	200-838-9	≥ 1 %

3.1.2 Reclosable packages

Child-resistant fastenings used on reclosable packages shall comply with EN ISO standard 8317 as amended relating to "Child-resistant packages – Requirements and methods of testing for reclosable packages" adopted by the European Committee for standardisation (CEN) and the International Standard Organisation (ISO).

3.1.3 Non-reclosable packages

Child-resistant fastenings used on non-reclosable packages shall comply with CEN standard EN 862 as amended relating to "Packaging – Child-resistant packaging – Requirements and testing procedures for non-reclosable packages for non-pharmaceutical products" adopted by the European Committee for Standardisation (CEN).

3.1.4 Notes

3.1.4.1. Evidence of conformity with the above standards may be certified only by laboratories which conform with Standard EN ISO/IEC 17025 as amended.

3.1.4.2. *Specific cases*

If it seems obvious that packaging is sufficiently safe for children because they cannot get access to the contents without the help of a tool, the test referred to in section 3.1.2 or 3.1.3 does not need to be performed.

In all other cases and when there are sufficient grounds for doubting the security of the closure for a child, the national authority may ask the person responsible for putting the

product on the market to give it a certificate from a certifying laboratory, referred to in section 3.1.4.1, stating that either:

- the type of closure is such that it is not necessary to perform the test referred to in section 3.1.2. or 3.1.3; or
- the closure has been tested and has been found to conform with the standards referred to above.

3.2. TACTILE WARNINGS

3.2.1. Packaging to be fitted with a tactile warning

Where substances or mixtures are supplied to the general public and classified for acute toxicity, skin corrosion, germ cell mutagenicity category 2, carcinogenicity category 2, reproductive toxicity category 2, respiratory sensitisation, or STOT, categories 1 and 2, aspiration hazard, or flammable gases, liquids and solids in categories 1 and 2, the packaging of whatever capacity, shall be fitted with a tactile warning of danger.

3.2.2 Provisions relating to tactile warning

- 3.2.2.1 This provision does not apply to aerosols which are only classified and labelled as "flammable aerosols, Category 1" or "flammable aerosols, Category 2". It does not apply either to transportable gas receptacles.
- 3.2.2.2. The technical specifications for tactile warning devices shall conform to EN ISO standard 11683 as amended "Packaging – Tactile warnings of danger-Requirements".

4. PART 4: SPECIAL RULE FOR LABELLING OF PLANT PROTECTION PRODUCTS

Without prejudice to the information required in accordance with Article 16 of Directive 91/414/EEC and Annex V of that Directive, the labelling for plant protection products subject to Directive 91/414/EEC shall also include the following wording:

EUH401 – "To avoid risks to human health and the environment, comply with the instructions for use"

5. PART 5: LIST OF HAZARDOUS SUBSTANCES AND MIXTURES TO WHICH ARTICLE 29(3) APPLIES

- Ready mixed cement and concrete in the wet state.

ANNEX III

List of Hazard Statements, supplemental hazard information and supplemental label elements

1. PART 1: HAZARD STATEMENTS

The hazard statements shall be applied in accordance with Parts 2, 3, 4 and 5 of Annex I.

In selecting the hazard statements in accordance with Articles 21 and 27, suppliers may use the combined hazard statements provided for in this Annex.

In accordance with Article 27 the following principles of precedence for hazard statements may apply to labelling:

- (a) If the hazard statement H410 "Very toxic to aquatic life with long lasting effects" is assigned, the statement H400 "Very toxic to aquatic life" may be omitted;
- (b) If the statement H314 "Causes severe skin burns and eye damage" is assigned, the statement H318 "Causes serious eye damage" may be omitted.

In order to indicate the route of administration or exposure the combined hazard statements in Table 1.2 may be used.

Table 1.1
Hazard statements for physical hazards

H200 ¹	Language	2.1 – Explosives, Unstable explosives
	BG	•
	ES	Explosivo inestable.
	CS	Nestabilní výbušnina.
	DA	Ustabilit eksplosiv.

H200 ¹	Language	2.1 – Explosives, Unstable explosives
	DE	Instabil, explosiv.
	ET	Ebapüsiv lõhkeaine.
	EL	
	EN	Unstable explosives.
	FR	Explosif instable.
	GA	Pléascáin éagobhsaí.
	IT	Esplosivo instabile.
	LV	Nestabili spr•dzienb•stami materi•li.
	LT	Nestabilios sprogios medžiagos.
	HU	Instabil robbanóanyagok.
	MT	Splussivi instabbli.
	NL	Instabiele ontplofbare stof.
	PL	Materia•y wybuchowe niestabilne.
	PT	Explosivo instável.
	RO	Exploziv instabil.
	SK	Nestabilné výbušniny.
	SL	Nestabilni eksplozivi.
	FI	Epästabiili räjähdde.
	SV	Instabilt explosivt.

H201	Language	2.1 – Explosives, Division 1.1
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H201	Language	2.1 – Explosives, Division 1.1
	BG	;
	ES	Explosivo; peligro de explosión en masa.
	CS	Výbušnina; nebezpečí masivního výbuchu.
	DA	Eksplisiv, masseeksplosionsfare.
	DE	Explosiv, Gefahr der Massenexplosion.
	ET	Plahvatusohtlik; massiplahvatusoht.
	EL	
	EN	Explosive; mass explosion hazard.
	FR	Explosif ; danger d'explosion en masse.
	GA	Pléascach; guais mhórphléasctha.
	IT	Esplosivo; pericolo di esplosione di massa.
	LV	Spr•dzienb•stams; masveida spr•dzienb•stam•ba.
	LT	Sprogios medžiagos, kelia masinio sprogiimo pavoj•.
	HU	Robbanóanyag; teljes tömeg felrobbanásának veszélye.
	MT	Splussiv; periklu li jisplodu kollha f'daqqa.
	NL	Ontploffbare stof; gevaar voor massa-explosie.
	PL	Materia• wybuchowy; zagrożenie wybuchem masowym.
	PT	Explosivo; perigo de explosão em massa.
	RO	Exploziv; pericol de explozie în mas•.
	SK	Výbušnina, nebezpečnosť rozsiahleho výbuchu.
	SL	Eksplozivno; nevarnost eksplozije v masi.

H201	Language	2.1 – Explosives, Division 1.1
	FI	Räjähde; massaräjähdysvaara.
	SV	Explosivt. Fara för massexplosion.

H202	Language	2.1 – Explosives, Division 1.2
	BG	;
	ES	Explosivo; grave peligro de proyección.
	CS	Výbušnina; vážné nebezpečí zasažení částicemi.
	DA	Eksplisiv, alvorlig fare for udslyngning af fragmenter.
	DE	Explosiv; große Gefahr durch Splitter, Spreng- und Wurfstücke.
	ET	Plahvatusohtlik; suur laialipaiskumisoht.
	EL	
	EN	Explosive, severe projection hazard.
	FR	Explosif ; danger sérieux de projection.
	GA	Pléascach, guais throm teilgin.
	IT	Esplosivo; grave pericolo di proiezione.
	LV	Spr•dzienb•stams; augsta izmetes b•stam•ba.
	LT	Sprogios medžiagos, kelia didel• išsvaidymo pavoj•.
	HU	Robbanóanyag; kivetés súlyos veszélye.
	MT	Splussiv, periklu serju ta' projezzjoni.
	NL	Ontplofbare stof, ernstig gevaar voor scherfwerking.
	PL	Materia• wybuchowy, powa•ne zagro•enie rozrzutem.

H202	Language	2.1 – Explosives, Division 1.2
	PT	Explosivo, perigo grave de projecções.
	RO	Exploziv; pericol grav de proiectare.
	SK	Výbušnina, závažné nebezpečnosť rozletenia úlomkov.
	SL	Eksplozivno, velika nevarnost za nastanek drobcev.
	FI	Räjähde; vakava sirpalevaara.
	SV	Explosivt. Allvarlig fara för splitter och kaststycken.

H203	Language	2.1 – Explosives, Division 1.3
	BG	; ,
	ES	Explosivo; peligro de incendio, de onda expansiva o de proyección.
	CS	Výbušnina; nebezpečí požáru, tlakové vlny nebo zasažení částicemi.
	DA	Eksplisiv, fare for brand, eksplosion eller udslyngning af fragmenter.
	DE	Explosiv; Gefahr durch Feuer, Luftdruck oder Splitter, Spreng- und Wurfstücke.
	ET	Plahvatusohtlik; süttimis-, plahvatus- või laialipaiskumisoht.
	EL	
	EN	Explosive; fire, blast or projection hazard.
	FR	Explosif; danger d'incendie, d'effet de souffle ou de projection.
	GA	Pléascach; guais dóiteáin, phléasctha nó teilgin.
	IT	Esplosivo; pericolo di incendio, di spostamento d'aria o di proiezione.

H203	Language	2.1 – Explosives, Division 1.3
	LV	Spr•dzienb•stams; uguns, triecienvi••a vai izmetes b•stam•ba.
	LT	Sprogios medžiagos, kelia gaisro, sprogimo arba išsvaidymo pavoj•.
	HU	Robbanóanyag; t•z, robbanás vagy kivetés veszélye.
	MT	Splussiv; periklu ta' nar, blast jew projezzjoni.
	NL	Ontploffbare stof; gevaar voor brand, luchtdrukwerking of scherfwerking.
	PL	Materia• wybuchowy; zagro•enie po•arem, wybuchem lub rozrzutem.
	PT	Explosivo; perigo de incêndio, sopro ou projecções.
	RO	Exploziv; pericol de incendiu, detonare sau proiectare.
	SK	Výbušnina, nebezpe•enstvo požiaru, výbuchu alebo rozletenia úlomkov.
	SL	Eksplzivno; nevarnost za nastanek požara, udarnega vala ali drobcev.
	FI	Räjähde; palo-, räjähdys- tai sirpalevaara.
	SV	Explosivt. Fara för brand, tryckvåg eller splitter och kaststycken.

H204	Language	2.1 – Explosives, Division 1.4
	BG	••••••••••
	ES	Peligro de incendio o de proyección.
	CS	Nebezpe•í požáru nebo zasažení •ásticemi.
	DA	Fare for brand eller udslyngning af fragmenter.
	DE	Gefahr durch Feuer oder Splitter, Spreng- und Wurfstücke.

H204	Language	2.1 – Explosives, Division 1.4
	ET	Süttimis- või laialipaiskumisoht.
	EL	
	EN	Fire or projection hazard.
	FR	Danger d'incendie ou de projection.
	GA	Guais dóiteáin nó teilgin.
	IT	Pericolo di incendio o di proiezione.
	LV	Uguns vai izmetes b•stam•ba.
	LT	Gaisro arba išsvaidymo pavojus.
	HU	T•z vagy kivetés veszélye.
	MT	Periklu ta' nar jew ta' projezzjoni.
	NL	Gevaar voor brand of scherfwerking.
	PL	Zagro•enie po•arem lub rozrzutem.
	PT	Perigo de incêndio ou projecções.
	RO	Pericol de incendiu sau de proiectare.
	SK	Nebezpe•enstvo požiaru alebo rozletenia úlomkov.
	SL	Nevarnost za nastanek požara ali drobcev.
	FI	Palo- tai sirpalevaara.
	SV	Fara för brand eller splitter och kaststycken.

H205	Language	2.1 – Explosives, Division 1.5
	BG	

H205	Language	2.1 – Explosives, Division 1.5
	ES	Peligro de explosión en masa en caso de incendio.
	CS	Při požáru může způsobit masivní výbuch.
	DA	Fare for masseekspllosion ved brand.
	DE	Gefahr der Massenexplosion bei Feuer.
	ET	Süttimise korral massiplahvatusoht.
	EL	
	EN	May mass explode in fire.
	FR	Danger d'explosion en masse en cas d'incendie.
	GA	D'fhéadfadh sé go mbeadh mórphléascadh i dtine.
	IT	Pericolo di esplosione di massa in caso d'incendio.
	LV	Ugun• var masveid• eksplod•t.
	LT	Per gaisr• gali sukelti masin• sproгим•.
	HU	T•z hatására a teljes tömeg felrobbanhat.
	MT	Jista' jisplodi f'daqqa fin-nar.
	NL	Gevaar voor massa-explosie bij brand.
	PL	Mo•e wybuch• masowo w przypadku po•aru.
	PT	Perigo de explosão em massa em caso de incêndio.
	RO	Pericol de explozie în mas• în caz de incendiu.
	SK	Nebezpe•enstvo rozsiahleho výbuchu pri požiari.
	SL	Pri požaru lahko eksplodira v masi.
	FI	Koko massa voi räjähtää tulessa.

H205	Language	2.1 – Explosives, Division 1.5
	SV	Fara för massexplosion vid brand.

H220	Language	2.2 – Flammable gases, Hazard Category 1
	BG	
	ES	Gas extremadamente inflamable.
	CS	Extrémn• ho•lavý plyn.
	DA	Yderst brandfarlig gas.
	DE	Extrem entzündbares Gas.
	ET	Eriti tuleohtlik gaas.
	EL	
	EN	Extremely flammable gas.
	FR	Gaz extrêmement inflammable.
	GA	Gás fíor-inadhainte.
	IT	Gas altamente infiammabile.
	LV	•paši viegli uzliesmojoša g•ze.
	LT	Ypa• degios dujos.
	HU	Rendkívül t•zveszélyes gáz.
	MT	Gass li jaqbad malajr •afna.
	NL	Zeer licht ontvlambaar gas.
	PL	Skrajnie •atwopalny gaz.
	PT	Gás extremamente inflamável.

H220	Language	2.2 – Flammable gases, Hazard Category 1
	RO	Gaz extrem de inflamabil.
	SK	Mimoriadne horľavý plyn.
	SL	Zelo lahko vnetljiv plin.
	FI	Erittäin helposti syttyvä kaasu.
	SV	Extremt brandfarlig gas.

H221	Language	2.2 – Flammable gases, Hazard Category 2
	BG	
	ES	Gas inflamable.
	CS	Hořlavý plyn.
	DA	Brandfarlig gas.
	DE	Entzündbares Gas.
	ET	Tuleohtlik gaas.
	EL	
	EN	Flammable gas.
	FR	Gaz inflammable.
	GA	Gás inadhainte.
	IT	Gas infiammabile.
	LV	Uzliesmojša gāze.
	LT	Degios dujos.
	HU	Tűzveszélyes gáz.

H221	Language	2.2 – Flammable gases, Hazard Category 2
	MT	Gass li jaqbad.
	NL	Ontvlambaar gas.
	PL	Gaz •atwopalny.
	PT	Gás inflamável.
	RO	Gaz inflamabil.
	SK	Hor•avý plyn.
	SL	Vnetljiv plin.
	FI	Syttyvä kaasu.
	SV	Brandfarlig gas.

H222	Language	2.3 – Flammable aerosols, Hazard Category 1
	BG	.
	ES	Aerosol extremadamente inflamable.
	CS	Extrémn• ho•lavý aerosol.
	DA	Yderst brandfarlig aerosol.
	DE	Extrem entzündbares Aerosol.
	ET	Eriti tuleohtlik aerosool.
	EL	
	EN	Extremely flammable aerosol.
	FR	Aérosol extrêmement inflammable.
	GA	Aerasól fíor-inadhainte.

H222	Language	2.3 – Flammable aerosols, Hazard Category 1
	IT	Aerosol altamente infiammabile.
	LV	•paši viegli uzliesmojošs aerosols.
	LT	Ypa• degus aerosolis.
	HU	Rendkívül t•veszélyes aeroszol.
	MT	Aerosol li jaqbad malajr •afna.
	NL	Zeer licht ontvlambare aerosol.
	PL	Skrajnie •atwopalny aerosol.
	PT	Aerossol extremamente inflamável.
	RO	Aerosol extrem de inflamabil.
	SK	Mimoriadne hor•avý aerosól.
	SL	Zelo lahko vnetljiv aerosol.
	FI	Erittäin helposti syttyvä aerosoli.
	SV	Extremt brandfarlig aerosol.

H223	Language	2.3 – Flammable aerosols, Hazard Category 2
	BG	
	ES	Aerosol inflamable.
	CS	Ho•lavý aerosol.
	DA	Brandfarlig aerosol.
	DE	Entzündbares Aerosol.
	ET	Tuleohtlik aerosool.

H223	Language	2.3 – Flammable aerosols, Hazard Category 2
	EL	
	EN	Flammable aerosol.
	FR	Aérosol inflammable.
	GA	Aerasól inadhainte.
	IT	Aerosol infiammabile.
	LV	Uzliesmojošs aerosols.
	LT	Degus aerosolis.
	HU	Tűveszélyes aeroszol.
	MT	Aerosol li jaqbad.
	NL	Ontvlambare aerosol.
	PL	Aerozol łatwopalny.
	PT	Aerossol inflamável.
	RO	Aerosol inflamabil.
	SK	Horľavý aerosól.
	SL	Vnetljiv aerosol.
	FI	Syttyvä aerosoli.
	SV	Brandfarlig aerosol.

H224	Language	2.6 – Flammable liquids, Hazard Category 1
	BG	.....
	ES	Líquido y vapores extremadamente inflamables.

H224	Language	2.6 – Flammable liquids, Hazard Category 1
	CS	Extrémně hořlavá kapalina a páry.
	DA	Yderst brandfarlig væske og damp.
	DE	Flüssigkeit und Dampf extrem entzündbar.
	ET	Eriti tuleohtlik vedelik ja aur.
	EL	
	EN	Extremely flammable liquid and vapour.
	FR	Liquide et vapeurs extrêmement inflammables.
	GA	Leacht fíor-inadhainte agus gal fhíor-inadhainte.
	IT	Liquido e vapori altamente infiammabili.
	LV	•paši viegli uzliesmojošs š•idrums un tvaiki.
	LT	Ypa• deg•s skystis ir garai.
	HU	Rendkívül t•zveszélyes folyadék és g•z.
	MT	Likwidu u fwar li jaqbd u malajr •afna.
	NL	Zeer licht ontvlambare vloeistof en damp.
	PL	Skrajnie •atwopalna ciecz i pary.
	PT	Líquido e vapor extremamente inflamáveis.
	RO	Lichid •i vapori extrem de inflamabili.
	SK	Mimoriadne hor•avá kvapalina a pary.
	SL	Zelo lahko vnetljiva teko•ina in hlapi.
	FI	Erittäin helposti syttyvä neste ja höyry.
	SV	Extremt brandfarlig vätska och ånga.

H225	Language	2.6 – Flammable liquids, Hazard Category 2
	BG	.....
	ES	Líquido y vapores muy inflamables.
	CS	Vysoce hořlavá kapalina a páry.
	DA	Meget brandfarlig væske og damp.
	DE	Flüssigkeit und Dampf leicht entzündbar.
	ET	Väga tuleohtlik vedelik ja aur.
	EL	
	EN	Highly flammable liquid and vapour.
	FR	Liquide et vapeurs très inflammables.
	GA	Leacht an-inadhainte agus gal an-inadhainte.
	IT	Liquido e vapori facilmente infiammabili.
	LV	Viegli uzliesmojšs šķidrums un tvaiki.
	LT	Labai degūs skystis ir garai.
	HU	Fokozottan tűzveszélyes folyadék és gőz.
	MT	Likwidu u fwar li jaqbdu malajr affna.
	NL	Licht ontvlambare vloeistof en damp.
	PL	Wysoce niebezpieczna ciecz i pary.
	PT	Líquido e vapor facilmente inflamáveis.
	RO	Lichid și vapori foarte inflamabili.
	SK	Veľmi horľavá kvapalina a pary.
	SL	Lahko vnetljiva tekočina in hlapi.

H225	Language	2.6 – Flammable liquids, Hazard Category 2
	FI	Helposti syttyvä neste ja höry.
	SV	Mycket brandfarlig vätska och ånga.

H226	Language	2.6 – Flammable liquids, Hazard Category 3
	BG	
	ES	Líquidos y vapores inflamables.
	CS	Hořlavá kapalina a páry.
	DA	Brandfarlig væske og damp.
	DE	Flüssigkeit und Dampf entzündbar.
	ET	Tuleohtlik vedelik ja aur.
	EL	•
	EN	Flammable liquid and vapour.
	FR	Liquide et vapeurs inflammables.
	GA	Leacht inadhainte agus gal inadhainte.
	IT	Liquido e vapori infiammabili.
	LV	Uzliesmojošs šķidrums un tvaiki.
	LT	Degūs skystis ir garai.
	HU	Tűzveszélyes folyadék és gőz.
	MT	Likwidu u fwar li jaqbdu.
	NL	Ontvlambare vloeistof en damp.
	PL	• atwopalna ciecz i pary.

H226	Language	2.6 – Flammable liquids, Hazard Category 3
	PT	Líquido e vapor inflamáveis.
	RO	Lichid •i vapori inflamabili.
	SK	Hor•avá kvapalina a pary.
	SL	Vnetljiva teko•ina in hlapi.
	FI	Syttyvä neste ja höyry.
	SV	Brandfarlig vätska och ånga.

H228	Language	2.7 – Flammable solids, Hazard Category 1, 2
	BG	
	ES	Sólido inflamable.
	CS	Ho•lavá tuhá látka.
	DA	Brandfarligt fast stof.
	DE	Entzündbarer Feststoff.
	ET	Tuleohtlik tahke aine.
	EL	
	EN	Flammable solid.
	FR	Matière solide inflammable.
	GA	Solad inadhainte.
	IT	Solido infiammabile.
	LV	Uzliesmojoša cieta viela.
	LT	Degi kietoji medžiaga.

H228	Language	2.7 – Flammable solids, Hazard Category 1, 2
	HU	Tűveszélyes szilárd anyag.
	MT	Solidu li jaqbad.
	NL	Ontvlambare vaste stof.
	PL	Substancja stała łatwopalna.
	PT	Sólido inflamável.
	RO	Solid inflamabil.
	SK	Horľavá tuhá látka.
	SL	Vnetljiva trdna snov.
	FI	Syttyvä kiinteä aine.
	SV	Brandfarligt fast ämne.

H240	Language	2.8 – Self-Reactive Substances and Mixtures, Type A 2.15 – Organic Peroxides, Type A
	BG	••••• •••
	ES	Peligro de explosión en caso de calentamiento.
	CS	Zahřívání může způsobit výbuch.
	DA	Ekspløsningsfare ved opvarmning.
	DE	Erwärmung kann Explosion verursachen.
	ET	Kuumenemisel võib plahvatada.
	EL	
	EN	Heating may cause an explosion.
	FR	Peut exploser sous l'effet de la chaleur.

H240	Language	2.8 – Self-Reactive Substances and Mixtures, Type A 2.15 – Organic Peroxides, Type A
	GA	D'fhéadfadh téamh a bheith ina chúis le pléascadh.
	IT	Rischio di esplosione per riscaldamento.
	LV	Sakaršana var izraisīt eksploziju.
	LT	Kaitinant gali sprogti.
	HU	H• hatására robbanhat.
	MT	It-tis•in jista' jikkaw•a splu•joni.
	NL	Ontploffingsgevaar bij verwarming.
	PL	Ogrzanie grozi wybuchem.
	PT	Risco de explosão sob a acção do calor.
	RO	Pericol de explozie în caz de încălzire.
	SK	Zahrievanie môže spôsobiť výbuch.
	SL	Segrevanje lahko povzroči eksplozijo.
	FI	Räjähdyksvaarallinen kuumennettaessa.
	SV	Explosivt vid uppvärmning.

H241	Language	2.8 – Self-Reactive Substances and Mixtures, Type B 2.15 – Organic Peroxides, Type B
	BG	••••• ••••••••• •••
	ES	Peligro de incendio o explosión en caso de calentamiento.
	CS	Zahřívání může způsobit požár nebo výbuch.
	DA	Brand- eller eksplosionsfare ved opvarmning.

H241	Language	2.8 – Self-Reactive Substances and Mixtures, Type B 2.15 – Organic Peroxides, Type B
	DE	Erwärmung kann Brand oder Explosion verursachen.
	ET	Kuumenemisel võib süttida või plahvatada.
	EL	
	EN	Heating may cause a fire or explosion.
	FR	Peut s'enflammer ou exploser sous l'effet de la chaleur.
	GA	D'fhéadfadh téamh a bheith ina chúis le dóiteán nó le pléascadh.
	IT	Rischio d'incendio o di esplosione per riscaldamento.
	LV	Sakaršana var izraisīt degšanu vai eksploziju.
	LT	Kaitinant gali sukelti gaisr• arba sprogti.
	HU	H• hatására meggyulladhat vagy robbanhat.
	MT	It-tis•in jista' jikkaw•a nar jew splu•joni.
	NL	Brand- of ontploffingsgevaar bij verwarming.
	PL	Ogrzanie mo•e spowodowa• po•ar lub wybuch.
	PT	Risco de explosão ou de incêndio sob a acção do calor.
	RO	Pericol de incendiu sau de explozie în caz de înc•lzire.
	SK	Zahrievanie môže spôsobi• požiar alebo výbuch.
	SL	Segrevanje lahko povzro•i požar ali eksplozijo.
	FI	Räjähdys- tai palovaarallinen kuumennettaessa.
	SV	Brandfarligt eller explosivt vid uppvärmning.

H242	Language	2.8 – Self-Reactive Substances and Mixtures, Types C, D, E, F 2.15 – Organic Peroxides, Types C, D, E, F
	BG	
	ES	Peligro de incendio en caso de calentamiento.
	CS	Zahřívání m•že zp•sobit požár.
	DA	Brandfare ved opvarmning.
	DE	Erwärmung kann Brand verursachen.
	ET	Kuumenemisel võib süttida.
	EL	• •
	EN	Heating may cause a fire.
	FR	Peut s'enflammer sous l'effet de la chaleur.
	GA	D'fhéadfadh téamh a bheith ina chúis le dóiteán.
	IT	Rischio d'incendio per riscaldamento.
	LV	Sakaršana var izraisīt degšanu.
	LT	Kaitinant gali sukelti gaisr•.
	HU	H• hatására meggyulladhat.
	MT	It-tis•in jista' jikkaw•a nar.
	NL	Brandgevaar bij verwarming.
	PL	Ogrzanie mo•e spowodowa• po•ar.
	PT	Risco de incêndio sob a acção do calor.
	RO	Pericol de incendiu în caz de înc•lzire.
	SK	Zahrievanie môže spôsobi• požiar.
	SL	Segrevanje lahko povzro•i požar.

H242	Language	2.8 – Self-Reactive Substances and Mixtures, Types C, D, E, F 2.15 – Organic Peroxides, Types C, D, E, F
	FI	Palovaarallinen kuumennettaessa.
	SV	Brandfarligt vid uppvärmning.

H250	Language	2.9 – Pyrophoric Liquids, Hazard Category 1 2.10 – Pyrophoric Solids, Hazard Category 1
	BG	
	ES	Se inflama espontáneamente en contacto con el aire.
	CS	Při styku se vzduchem se samovolně vznítí.
	DA	Selvantænder ved kontakt med luft.
	DE	Entzündet sich in Berührung mit Luft von selbst.
	ET	Kokkupuutel õhuga süttib iseenesest.
	EL	
	EN	Catches fire spontaneously if exposed to air.
	FR	S'enflamme spontanément au contact de l'air.
	GA	Téann trí thine go spontáineach má nochtar don aer.
	IT	Spontaneamente infiammabile all'aria.
	LV	Spontāni aizdegas saskarot ar gaisu.
	LT	Veikiami oro sąvaime užsidega.
	HU	Levegővel érintkezve önmagától meggyullad.
	MT	Jieku n-nar spontanjament jekk ikun espost għall-arja.
	NL	Vat spontaan vlam bij blootstelling aan lucht.

H250	Language	2.9 – Pyrophoric Liquids, Hazard Category 1 2.10 – Pyrophoric Solids, Hazard Category 1
	PL	Zapala się samorzutnie w przypadku wystawienia na działanie powietrza.
	PT	Risco de inflamação espontânea em contacto com o ar.
	RO	Se aprinde spontan, în contact cu aerul.
	SK	Pri kontakte so vzduchuom sa spontánne vznieti.
	SL	Samodejno se vžge na zraku.
	FI	Syttyy itsestään palamaan joutuessaan kosketuksiin ilman kanssa.
	SV	Spontanantänder vid kontakt med luft.

H251	Language	2.11 – Self-Heating Substances and Mixtures, Hazard Category 1
	BG	.
	ES	Se calienta espontáneamente; puede inflamarse.
	CS	Samovolně se zahřívá: může se vznítit.
	DA	Selvopvarmende, kan selvantænde.
	DE	Selbsterhitzungsfähig; kann in Brand geraten.
	ET	Isekuumenev, võib süttida.
	EL	
	EN	Self-heating: may catch fire.
	FR	Matière auto-échauffante; peut s'enflammer.
	GA	Féinteámh: d'fhéadfadh sé dul trí thine.

H251	Language	2.11 – Self-Heating Substances and Mixtures, Hazard Category 1
	IT	Autoriscaldante; può infiammarsi.
	LV	Pašsasilstošs; var aizdegties.
	LT	Savaime kaistan•ios, gali užsidegti.
	HU	Önmeleged•: meggyulladhat.
	MT	Jis•on wa•du: jista' jie•u n-nar.
	NL	Vatbaar voor zelfverhitting: kan vlam vatten.
	PL	Substancja samonagrzewaj•ca si•: mo•e si• zapali•.
	PT	Susceptível de auto-aquecimento: risco de inflamação.
	RO	Se autoînc•lze•te, pericol de aprindere.
	SK	Samovo•ne sa zahrieva; môže sa vznieti•.
	SL	Samosegrevanje: lahko povzro•i požar.
	FI	Itsestään kuumeneva; voi syttyä palamaan.
	SV	Självpuffettande. Kan börja brinna.

H252	Language	2.11 – Self-Heating Substances and Mixtures, Hazard Category 2
	BG	
	ES	Se calienta espontáneamente en grandes cantidades; puede inflamarse.
	CS	Ve velkém množství se samovoln• zah•ívá; m•že se vznítit.
	DA	Selvopvarmende i store mængder, kan selvantænde.
	DE	In großen Mengen selbsterhitzungsfähig; kann in Brand geraten.

H252	Language	2.11 – Self-Heating Substances and Mixtures, Hazard Category 2
	ET	Suurtes kogustes isekuumenev, võib süttida.
	EL	
	EN	Self-heating in large quantities; may catch fire.
	FR	Matière auto-échauffante en grandes quantités; peut s'enflammer.
	GA	Féintéamh ina mhórchainníochtaí; d'fhéadfadh sé dul trí thine.
	IT	Autoriscaldante in grandi quantità; può infiammarsi.
	LV	Lielos apjomos pašsasilstošs; var aizdegties.
	LT	Laikant dideliais kiekiais savaime kaista, gali užsidegti.
	HU	Nagy mennyiségben önmeleged•; meggyulladhat.
	MT	Jis•on wa•du f'kwantitajiet kbar; jista' jie•u n-nar.
	NL	In grote hoeveelheden vatbaar voor zelfverhitting; kan vlam vatten.
	PL	Substancja samonagrzewaj•ca si• w du•ych ilo•ciach; mo•e si• zapali•.
	PT	Susceptível de auto-aquecimento em grandes quantidades: risco de inflamação.
	RO	Se autoînc•lze•te, în cantit•i mari pericol de aprindere.
	SK	Vo ve•kých množstvách sa samovo•ne zahrieva; môže sa vznieti•.
	SL	Samosegrevanje v velikih koli•inah; lahko povzro•i požar.
	FI	Suurina määrinä itsestään kuumeneva; voi syttyä palamaan.
	SV	Självupphettande i stora mängder. Kan börja brinna.

H260	Language	2.12 – Substances and Mixtures which, in contact with water, emit flammable gases, Hazard Category 1
	BG	
	ES	En contacto con el agua desprende gases inflamables que pueden inflamarse espontáneamente.
	CS	Při styku s vodou uvolňuje hořlavé plyny, které se mohou samovolně vznítit.
	DA	Ved kontakt med vand udvikles brandfarlige gasser, som kan selvantænde.
	DE	In Berührung mit Wasser entstehen entzündbare Gase, die sich spontan entzünden können.
	ET	Kokkupuutel veega eraldab tuleohtlikke gaase, mis võivad iseenesest süttida.
	EL	•••••
	EN	In contact with water releases flammable gases which may ignite spontaneously.
	FR	Dégage au contact de l'eau des gaz inflammables qui peuvent s'enflammer spontanément.
	GA	I dteagmháil le huisce scaoiltear gás inadhainte a d'fhéadfadh uathadhaint.
	IT	A contatto con l'acqua libera gas infiammabili che possono infiammarsi spontaneamente.
	LV	Nonkot saskar ar deni, izdala uzliesmojošas gzes, kas var spontāni aizdegties.
	LT	Kontaktuodami su vandeniu išskiria degias dujas, kurios gali savaime užsidegti.
	HU	Vízzel érintkezve öngyulladásra hajlamos tűveszélyes gázokat bocsát ki.

H260	Language	2.12 – Substances and Mixtures which, in contact with water, emit flammable gases, Hazard Category 1
	MT	Meta jmiss ma' l-ilma jer•i gassijiet li jaqbd u li jistg•u jie•du n-nar spontanjament.
	NL	In contact met water komen ontvlambare gassen vrij die spontaan kunnen ontbranden.
	PL	W kontakcie z wod• uwalniaj• atwopalne gazy, które mog• ulega• samozapaleniu.
	PT	Em contacto com a água liberta gases que se podem inflamar espontaneamente.
	RO	În contact cu apa degaj• gaze inflamabile care se pot aprinde spontan.
	SK	Pri kontakte s vodou uvo••uje hor•avé plyny, ktoré sa môžu spontánne zapáli•.
	SL	V stiku z vodo se sproš•ajo vnetljivi plini, ki se lahko samodejno vžgejo.
	FI	Kehittää itsestään syttyviä kaasuja veden kanssa.
	SV	Vid kontakt med vatten utvecklas brandfarliga gaser som kan självantända.

H261	Language	2.12 – Substances and Mixtures which, in contact with water, emit flammable gases, Hazard Categories 2 and 3
	BG	••• ••••••••.
	ES	En contacto con el agua desprende gases inflamables.
	CS	P•i styku s vodou uvo••uje ho•lavé plyny.
	DA	Ved kontakt med vand udvikles brandfarlige gasser.
	DE	In Berührung mit Wasser entstehen entzündbare Gase.
	ET	Kokkupuutel veega eraldab tuleohtlikke gaase.

H261	Language	2.12 – Substances and Mixtures which, in contact with water, emit flammable gases, Hazard Categories 2 and 3
	EL	•••••.
	EN	In contact with water releases flammable gases.
	FR	Dégage au contact de l'eau des gaz inflammables.
	GA	I dteagmháil le huisce scaoiltear gáis inadhainte.
	IT	A contatto con l'acqua libera gas infiammabili.
	LV	Non•kot saskar• ar •deni, izdala uzliesmojšu g•zi.
	LT	Kontaktuodami su vandeniu išskiria degias dujas
	HU	Vízzel érintkezve t•zveszélyes gázokat bocsát ki.
	MT	Meta jmiss ma' l-ilma jer•i gassijiet li jaqbd.
	NL	In contact met water komen ontvlambare gassen vrij.
	PL	W kontakcie z wod• uwalnia •atwopalne gazy.
	PT	Em contacto com a água liberta gases inflamáveis.
	RO	În contact cu apa degaj• gaze inflamabile.
	SK	Pri kontakte s vodou uvo••uje hor•avé plyny.
	SL	V stiku z vodo se sproš•ajo vnetljivi plini.
	FI	Kehittää syttyviä kaasuja veden kanssa.
	SV	Vid kontakt med vatten utvecklas brandfarliga gaser.

H270	Language	2.4 – Oxidising Gases, Hazard Category 1
	BG	• • • • • • • • • • • • • • • ;
	ES	Puede provocar o agravar un incendio; comburente.

H270	Language	2.4 – Oxidising Gases, Hazard Category 1
	CS	M•že zp•sobit nebo zesílit požár; oxidant.
	DA	Kan forårsage eller forstærke brand, brandnærende.
	DE	Kann Brand verursachen oder verstärken; Oxidationsmittel.
	ET	Võib põhjustada süttimise või soodustada põlemist; oksüdeerija.
	EL	
	EN	May cause or intensify fire; oxidiser.
	FR	Peut provoquer ou aggraver un incendie ; comburant.
	GA	D'fhéadfadh sé a bheith ina chúis le tine nó cur le tine; ocsaídeoir.
	IT	Può provocare o aggravare un incendio; comburente.
	LV	Var izrais•t vai pastiprin•t degšanū, oksid•t•js.
	LT	Gali sukelti arba padidinti gaisr•, oksidatorius.
	HU	Tűzet okozhat vagy fokozhatja a t•z intenzitását, oxidáló hatású.
	MT	Jista' jikkaw•a jew i•id in-nar; ossidant.
	NL	Kan brand veroorzaken of bevorderen; oxiderend.
	PL	Mo•e spowodowa• lub intensyfikowa• po•ar; utleniacz.
	PT	Pode provocar ou agravar incêndios; comburente.
	RO	Poate provoca sau agrava un incendiu; oxidant.
	SK	Môže spôsobi• alebo prispie• k rozvoju požiaru; oxida•né •inidlo.
	SL	Lahko povzro•i ali okrepi požar; oksidativna snov.
	FI	Aiheuttaa tulipalon vaaran tai edistää tulipaloa; hapettava.

H270	Language	2.4 – Oxidising Gases, Hazard Category 1
	SV	Kan orsaka eller intensifiera brand. Oxiderande.

H271	Language	2.13 – Oxidising Liquids, Hazard Category 1 2.14 – Oxidising Solids, Hazard Category 1
	BG	•••••
	ES	Puede provocar un incendio o una explosión; muy comburente.
	CS	Může způsobit požár nebo výbuch; silný oxidant.
	DA	Kan forårsage brand eller eksplosion, stærkt brandnærende.
	DE	Kann Brand oder Explosion verursachen; starkes Oxidationsmittel.
	ET	Võib põhjustada süttimise või plahvatuse; tugev oksüdeerija.
	EL	•••••
	EN	May cause fire or explosion; strong oxidiser.
	FR	Peut provoquer un incendie ou une explosion; comburant puissant.
	GA	D'fhéadfadh sé a bheith ina chúis le tine nó le pléascadh; an-ocsaídeoir.
	IT	Può provocare un incendio o un'esplosione; molto comburente.
	LV	Var izraisīt degšanu vai eksploziju, oksidētājs.
	LT	Gali sukelti gaisrą arba sproginimą, stiprus oksidatorius.
	HU	Tűzet vagy robbanást okozhat; erős oxidáló hatású.
	MT	Jista' jikkawwa nar jew splunjoni; ossidant qawwi.
	NL	Kan brand of ontploffingen veroorzaken; sterk oxiderend.

H271	Language	2.13 – Oxidising Liquids, Hazard Category 1 2.14 – Oxidising Solids, Hazard Category 1
	PL	Mo•e spowodowa• po•ar lub wybuch; silny utleniacz.
	PT	Risco de incêndio ou de explosão; muito comburente.
	RO	Poate provoca un incendiu sau o explozie; oxidant puternic.
	SK	Môže spôsobi• požiar alebo výbuch; silné oxida•né •inidlo.
	SL	Lahko povzro•i požar ali eksplozijo; mo•na oksidativna snov.
	FI	Aiheuttaa tulipalo- tai räjähdysvaaran; voimakkaasti hapettava.
	SV	Kan orsaka brand eller explosion. Starkt oxiderande.

H272	Language	2.13 – Oxidising Liquids, Hazard Category 2, 3 2.14 – Oxidising Solids, Hazard Category 2, 3
	BG	•
	ES	Puede agravar un incendio; comburente.
	CS	M•že zesílit požár; oxidant.
	DA	Kan forstærke brand, brandnærende.
	DE	Kann Brand verstärken; Oxidationsmittel.
	ET	Võib soodustada põlemist; oksüdeerija.
	EL	
	EN	May intensify fire; oxidiser.
	FR	Peut aggraver un incendie; comburant.
	GA	D'fhéadfadh sé cur le tine; ocsaídeoir.
	IT	Può aggravare un incendio; comburente.

H272	Language	2.13 – Oxidising Liquids, Hazard Category 2, 3 2.14 – Oxidising Solids, Hazard Category 2, 3
	LV	Var pastiprin•t degšanu; oksid•t•js.
	LT	Gali padidinti gaisr•, oksidatorius.
	HU	Fokozhatja a t•z intenzitását; oxidáló hatású.
	MT	Jista' j•id in-nar; ossidant.
	NL	Kan brand bevorderen; oxiderend.
	PL	Mo•e intensyfikowa• po•ar; utleniacz.
	PT	Pode agravar incêndios; comburente.
	RO	Poate agrava un incendiu; oxidant.
	SK	Môže prispie• k rozvoju požiaru; oxida•né •inidlo.
	SL	Lahko okrepi požar; oksidativna snov.
	FI	Voi edistää tulipaloa; hapettava.
	SV	Kan intensifiera brand. Oxiderande.

H280	Language	2.5 – Gases under pressure: Compressed gas Liquefied gas Dissolved gas
	BG	•••
	ES	Contiene gas a presión; peligro de explosión en caso de calentamiento.
	CS	Obsahuje plyn pod tlakem; p•i zah•ívání m•že vybuchnout.
	DA	Indeholder gas under tryk, kan eksplodere ved opvarmning.

H280	Language	2.5 – Gases under pressure: Compressed gas Liquefied gas Dissolved gas
	DE	Enthält Gas unter Druck; kann bei Erwärmung explodieren.
	ET	Sisaldab rõhu all olevat gaasi, kuumenemisel võib plahvatada.
	EL	
	EN	Contains gas under pressure; may explode if heated.
	FR	Contient un gaz sous pression; peut exploser sous l'effet de la chaleur.
	GA	Gás istigh ann, faoi bhrú; d'fhéadfadh sé pléascadh, má théitear.
	IT	Contiene gas sotto pressione; può esplodere se riscaldato.
	LV	Satur g•zi zem spiediena; karstum• var eksplod•t.
	LT	Turi sl•gio veikiam• duj•, kaitinant gali sprogti.
	HU	Nyomás alatt lév• gázt tartalmaz; h• hatására robbanhat.
	MT	Fih gass ta•t pressjoni; jista' jisplodi jekk jissa••an.
	NL	Bevat gas onder druk; kan ontploffen bij verwarming.
	PL	Zawiera gaz pod ci•nieniem; ograniczenie grozi wybuchem.
	PT	Contém gás sob pressão; risco de explosão sob a acção do calor.
	RO	Con•ine un gaz sub presiune; pericol de explozie în caz de înc•lzire.
	SK	Obsahuje plyn pod tlakom, pri zahriatí môže vybuchnú•.
	SL	Vsebuje plin pod tlakom; segrevanje lahko povzro•i eksplozijo.
	FI	Sisältää paineen alaista kaasua; voi räjähtää kuumennettaessa.
	SV	Innehåller gas under tryck. Kan explodera vid uppvärmning.

H281	Language	2.5 – Gases under pressure: Refrigerated liquefied gas
	BG	•••••

H281	Language	2.5 – Gases under pressure: Refrigerated liquefied gas
	NL	Bevat sterk gekoeld gas; kan cryogene brandwonden of letsel veroorzaken.
	PL	Zawiera schłodzony gaz; może spowodować oparzenia kriogeniczne lub obrażenia.
	PT	Contém gás refrigerado; pode provocar queimaduras ou lesões criogénicas.
	RO	Conține un gaz răcit; poate cauza arsuri sau leziuni criogenice.
	SK	Obsahuje schladený plyn; môže spôsobiť kryogénne popáleniny alebo poranenia.
	SL	Vsebuje ohlajen utekočilen plin; lahko povzroči ozeblino ali poškodbe.
	FI	Sisältää jäähdytettyä kaasua; voi aiheuttaa jäätymisvamman.
	SV	Innehåller kyld gas. Kan orsaka svåra köldskador.

H290	Language	2.16 – Corrosive to metals, Hazard Category 1
	BG	
	ES	Puede ser corrosivo para los metales.
	CS	Může být korozivní pro kovy.
	DA	Kan ætse metaller.
	DE	Kann gegenüber Metallen korrosiv sein.
	ET	Võib söövitada metalle.
	EL	
	EN	May be corrosive to metals.
	FR	Peut être corrosif pour les métaux.

H290	Language	2.16 – Corrosive to metals, Hazard Category 1
	GA	D'fhéadfadh sé a bheith creimneach do mhiotail.
	IT	Può essere corrosivo per i metalli.
	LV	Var kod•gi iedarboties uz met•liem.
	LT	Gali •sdinti metalus.
	HU	Fémekre korrozív hatású lehet.
	MT	Jista' jkun korru•iv g•all-metalli.
	NL	Kan bijtend zijn voor metalen.
	PL	Mo•e powodowa• korozj• metali.
	PT	Pode ser corrosivo para os metais.
	RO	Poate fi corosiv pentru metale.
	SK	Môže by• korozívna pre kovy.
	SL	Lahko je jedko za kovine.
	FI	Voi syövyttää metalleja.
	SV	Kan vara korrosivt för metaller.

Table 1.2
Hazard statements for health hazards

H300	Language	3.1 – Acute toxicity (oral), Hazard Category 1, 2
	BG	
	ES	Mortal en caso de ingestión.
	CS	P•i požití m•že zp•sobit smrt.

H300	Language	3.1 – Acute toxicity (oral), Hazard Category 1, 2
	DA	Livsfarlig ved indtagelse.
	DE	Lebensgefahr bei Verschlucken.
	ET	Allaneelamisel surmav.
	EL	.
	EN	Fatal if swallowed.
	FR	Mortel en cas d'ingestion.
	GA	Marfach má shlogtar.
	IT	Letale se ingerito.
	LV	Norijot iest•jas n•ve.
	LT	Mirtina prarijus.
	HU	Lenyelve halálos.
	MT	Fatali jekk jinbela'.
	NL	Dodelijk bij inslikken.
	PL	Po•kni•cie grozi •mierci•.
	PT	Mortal por ingestão.
	RO	Mortal în caz de înghi•ire.
	SK	Smrte•ný po požití.
	SL	Smrtno pri zaužitju.
	FI	Tappavaa nieltynä.
	SV	Dödligt vid förtäring.

H301	Language	3.1 – Acute toxicity (oral), Hazard Category 3
	BG	
	ES	Tóxico en caso de ingestión.
	CS	Toxický p•i požití.
	DA	Giftig ved indtagelse.
	DE	Giftig bei Verschlucken.
	ET	Allaneelamisel mürgine.
	EL	••
	EN	Toxic if swallowed.
	FR	Toxique en cas d'ingestion.
	GA	Tocsaineach má shlogtar.
	IT	Tossico se ingerito.
	LV	Toksisks, ja norij.
	LT	Toksiška prarijus.
	HU	Lenyelve mérgez•.
	MT	Tossiku jekk jinbela'.
	NL	Giftig bij inslikken.
	PL	Dzia•a toksycznie po po•kni•ciu.
	PT	Tóxico por ingestão.
	RO	Toxic în caz de înghi•ire.
	SK	Toxický po požití.
	SL	Strupeno pri zaužitju.

H301	Language	3.1 – Acute toxicity (oral), Hazard Category 3
	FI	Myrkyllistä nieltynä.
	SV	Giftigt vid förtäring.

H302	Language	3.1 – Acute toxicity (oral), Hazard Category 4
	BG	
	ES	Nocivo en caso de ingestión.
	CS	Zdraví škodlivý p•i požití.
	DA	Farlig ved indtagelse.
	DE	Gesundheitsschädlich bei Verschlucken.
	ET	Allaneelamisel kahjulik.
	EL	•.
	EN	Harmful if swallowed.
	FR	Nocif en cas d'ingestion.
	GA	Díobhálach má shlogtar.
	IT	Nocivo se ingerito.
	LV	Kait•gs, ja norij.
	LT	Kenksminga prarijus.
	HU	Lenyelve ártalmas.
	MT	Jag•mel il-•sara jekk jinbela'.
	NL	Schadelijk bij inslikken.
	PL	Dzia•a szkodliwe po po•kni•ciu.

H302	Language	3.1 – Acute toxicity (oral), Hazard Category 4
	PT	Nocivo por ingestão.
	RO	Nociv în caz de înghițire.
	SK	Škodlivý po požití.
	SL	Zdravju škodljivo pri zaužitju.
	FI	Haitallista nieltynä.
	SV	Skadligt vid förtäring.

H304	Language	3.10 – Aspiration hazard, Hazard Category 1
	BG	
	ES	Puede ser mortal en caso de ingestión y penetración en las vías respiratorias.
	CS	Při požití a vniknutí do dýchacích cest může způsobit smrt.
	DA	Kan være livsfarligt, hvis det indtages og kommer i luftvejene.
	DE	Kann bei Verschlucken und Eindringen in die Atemwege tödlich sein.
	ET	Allaneelamisel või hingamisteedesse sattumisel võib olla surmav.
	EL	...
	EN	May be fatal if swallowed and enters airways.
	FR	Peut être mortel en cas d'ingestion et de pénétration dans les voies respiratoires.
	GA	D'fhéadfadh sé a bheith marfach má shlogtar é agus má théann sé isteach sna haerbhealaí.

H304	Language	3.10 – Aspiration hazard, Hazard Category 1
	HU	Lenyelve és a légutakba kerülve halálos lehet.
	IT	Può essere letale in caso di ingestione e di penetrazione nelle vie respiratorie.
	LV	Var izraisīt nāvi, ja norij vai iekļūst elpceļos.
	LT	Prarijus ir patekus kvėpavimo takus, gali sukelti mirtį.
	MT	Jista' jkun fatali jekk jinbela' u jidol fil-pajpijiet tan-nifs.
	NL	Kan dodelijk zijn als de stof bij inslikken in de luchtwegen terechtkomt.
	PL	Po•kni•cie i dostanie si• przez drogi oddechowe mo•e grozi••mierci•.
	PT	Pode ser mortal por ingestão e penetração nas vias respiratórias.
	RO	Poate fi mortal în caz de înghi•ire •i de p•trundere în c•ile respiratorii.
	SK	Môže by• smrte•ný po požití a vniknutí do dýchacích ciest.
	SL	Pri zaužitju in vstopu v dihalne poti je lahko smrtno.
	FI	Voi olla tappavaa nieltynä ja joutuessaan hengitysteihin.
	SV	Kan vara dödligt vid förtäring om det kommer ner i luftvägarna.

H310	Language	3.1 – Acute toxicity (dermal), Hazard Category 1, 2
	BG	
	ES	Mortal en contacto con la piel.
	CS	P•i styku s k•ží m•že zp•sobit smrt.
	DA	Livsfarlig ved hudkontakt.

H310	Language	3.1 – Acute toxicity (dermal), Hazard Category 1, 2
	DE	Lebensgefahr bei Hautkontakt.
	ET	Nahale sattumisel surmav.
	EL	
	EN	Fatal in contact with skin.
	FR	Mortel par contact cutané.
	GA	Marfach i dteagmháil leis an gcráiceann.
	HU	Bőrrel érintkezve halálos.
	IT	Letale per contatto con la pelle.
	LV	Non•kot saskar• ar •du, iest•jas n•ve.
	LT	Mirtina susilietus su oda.
	MT	Fatali jekk imiss mal-•ilda.
	NL	Dodelijk bij contact met de huid.
	PL	Grozi •mierci• w kontakcie ze skór•.
	PT	Mortal em contacto com a pele.
	RO	Mortal în contact cu pielea.
	SK	Smrte•ný pri kontakte s pokožkou.
	SL	Smrtno v stiku s kožo.
	FI	Tappavaa joutuessaan iholle.
	SV	Dödligt vid hudkontakt.

H311	Language	3.1 – Acute toxicity (dermal), Hazard Category 3
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H311	Language	3.1 – Acute toxicity (dermal), Hazard Category 3
	BG	
	ES	Tóxico en contacto con la piel.
	CS	Toxický p•i styku s k•ží.
	DA	Giftig ved hudkontakt.
	DE	Giftig bei Hautkontakt.
	ET	Nahale sattumisel mürgine.
	EL	
	EN	Toxic in contact with skin.
	FR	Toxique par contact cutané.
	GA	Tocsaineach i dteagmháil leis an gcaiceann.
	IT	Tossico per contatto con la pelle.
	LV	Toksisks, ja non•k saskar• ar •du.
	LT	Toksiška susilietus su oda.
	HU	B•rrel érintkezve mérgez•.
	MT	Tossiku meta jmiss mal-•ilda.
	NL	Giftig bij contact met de huid.
	PL	Dzia•a toksycznie w kontakcie ze skór•.
	PT	Tóxico em contacto com a pele.
	RO	Toxic în contact cu pielea.
	SK	Toxický pri kontakte s pokožkou.
	SL	Strupeno v stiku s kožo.

H311	Language	3.1 – Acute toxicity (dermal), Hazard Category 3
	FI	Myrkyllistä joutuessaan iholle.
	SV	Giftigt vid hudkontakt.

H312	Language	3.1 – Acute toxicity (dermal), Hazard Category 4
	BG	
	ES	Nocivo en contacto con la piel.
	CS	Zdraví škodlivý p•i styku s k•ží.
	DA	Farlig ved hudkontakt.
	DE	Gesundheitsschädlich bei Hautkontakt.
	ET	Nahale sattumisel kahjulik.
	EL	
	EN	Harmful in contact with skin.
	FR	Nocif par contact cutané.
	GA	Díobhálach i dteagmháil leis an gcráiceann.
	IT	Nocivo per contatto con la pelle.
	LV	Kait•gs, ja non•k saskar• ar •du.
	LT	Kenksminga susilietus su oda.
	HU	B•rrel érintkezve ártalmas.
	MT	Jag•mel il-•sara meta jmiss mal-•ilda.
	NL	Schadelijk bij contact met de huid.
	PL	Dzia•a szkodliwe w kontakcie ze skór•.

H312	Language	3.1 – Acute toxicity (dermal), Hazard Category 4
	PT	Nocivo em contacto com a pele.
	RO	Nociv în contact cu pielea.
	SK	Škodlivý pri kontakte s pokožkou.
	SL	Zdravju škodljivo v stiku s kožo.
	FI	Haitallista joutuessaan iholle.
	SV	Skadligt vid hudkontakt.

H314	Language	3.2 – Skin corrosion/irritation, Hazard Category 1A, 1B, 1C
	BG	.
	ES	Provoca quemaduras graves en la piel y lesiones oculares graves.
	CS	Způsobuje těžké poleptání kůže a poškození očí.
	DA	Forårsager svære forbrændinger af huden og øjenskader.
	DE	Verursacht schwere Verätzungen der Haut und schwere Augenschäden.
	ET	Põhjustab rasket nahasöövitust ja silmakahjustusi.
	EL •
	EN	Causes severe skin burns and eye damage.
	FR	Provoque des brûlures de la peau et des lésions oculaires graves.
	GA	Ina chúis le dónna tromchúiseacha craicinn agus le damáiste don tsúil.
	IT	Provoca gravi ustioni cutanee e gravi lesioni oculari.
	LV	Izraisa smagus •das apdegumus un acu boj•jumus.

H314	Language	3.2 – Skin corrosion/irritation, Hazard Category 1A, 1B, 1C
	LT	Smarkiai nudegina od• ir pažeidžia akis.
	HU	Súlyos égési sérülést és szemkárosodást okoz.
	MT	Jag•mel •ruq serju lill-•ilda u •sara lill-g•ajnejn.
	NL	Veroorzaakt ernstige brandwonden en oogletsel.
	PL	Powoduje powa•ne oparzenia skóry oraz uszkodzenia oczu .
	PT	Provoca queimaduras na pele e lesões oculares graves.
	RO	Provoac• arsuri grave ale pielii •i lezarea ochilor.
	SK	Spôsobuje vážne poleptanie kože a poškodenie o•i.
	SL	Povzro•a hude opekline kože in poškodbe o•i.
	FI	Voimakkaasti ihoa syövyttävää ja silmiä vaurioittavaa.
	SV	Orsakar allvarliga frätskador på hud och ögon.

H315	Language	3.2 – Skin corrosion/irritation, Hazard Category 2
	BG	•••••
	ES	Provoca irritación cutánea.
	CS	Dráždí k•ži.
	DA	Forårsager hudirritation.
	DE	Verursacht Hautreizungen.
	ET	Põhjustab nahaärritust.
	EL	
	EN	Causes skin irritation.

H315	Language	3.2 – Skin corrosion/irritation, Hazard Category 2
	FR	Provoque une irritation cutanée.
	GA	Ina chúis le greannú craicinn.
	IT	Provoca irritazione cutanea.
	LV	Kairina •du.
	LT	Dirgina od•.
	HU	B•riritáló hatású.
	MT	Jag•mel irritazzjoni tal-•ilda.
	NL	Veroorzaakt huidirritatie.
	PL	Dzia•a dra•ni•co na skór•.
	PT	Provoca irritação cutânea.
	RO	Provoac• iritarea pielii.
	SK	Dráždi kožu.
	SL	Povzro•a draženje kože.
	FI	Ärsyttää ihoa.
	SV	Irriterar huden.

H317	Language	3.4 – Sensitisation – Skin, Hazard Category 1, 1A, 1B
	BG	
	ES	Puede provocar una reacción alérgica en la piel.
	CS	M•že vyvolat alergickou kožní reakci.
	DA	Kan forårsage allergisk hudreaktion.

H317	Language	3.4 – Sensitisation – Skin, Hazard Category 1, 1A, 1B
	DE	Kann allergische Hautreaktionen verursachen.
	ET	Võib põhjustada allergilist nahareaktsiooni.
	EL	
	EN	May cause an allergic skin reaction.
	FR	Peut provoquer une allergie cutanée.
	GA	D'fhéadfadh sé a bheith ina chúis le frithghníomh ailléirgeach craicinn.
	IT	Può provocare una reazione allergica cutanea.
	LV	Var izraisīt alerģisku ādas reakciju.
	LT	Gali sukelti alerginį odos reakciją.
	HU	Allergiás bőrreakciót válthat ki.
	MT	Jista' jikkawha reazzjoni allergika tal-ildha.
	NL	Kan een allergische huidreactie veroorzaken.
	PL	Może powodować reakcję alergiczną skóry.
	PT	Pode provocar uma reacção alérgica cutânea.
	RO	Poate provoca o reacție alergică a pielii.
	SK	Môže vyvolať alergickú kožnú reakciu.
	SL	Lahko povzroči alergijski odziv kože.
	FI	Voi aiheuttaa allergisen ihoreaktion.
	SV	Kan orsaka allergisk hudreaktion.

H318	Language	3.3 – Serious eye damage/eye irritation, Hazard Category 1
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H318	Language	3.3 – Serious eye damage/eye irritation, Hazard Category 1
	BG	
	ES	Provoca lesiones oculares graves.
	CS	Zp•sobuje vážné poškození o•í.
	DA	Forårsager alvorlig øjenskade.
	DE	Verursacht schwere Augenschäden.
	ET	Põhjustab raskeid silmakahjustusi.
	EL	
	EN	Causes serious eye damage.
	FR	Provoque des lésions oculaires graves.
	GA	Ina chúis le damáiste tromchúiseach don tsúil.
	IT	Provoca gravi lesioni oculari.
	LV	Izraisa nopietnus acu boj•jumus.
	LT	Smarkiai pažeidžia akis.
	HU	Súlyos szemkárosodást okoz.
	MT	Jag•mel •sara serja lill-g•ajnejn.
	NL	Veroorzaakt ernstig oogletsel.
	PL	Powoduje poważne uszkodzenie oczu.
	PT	Provoca lesões oculares graves.
	RO	Provoacă leziuni oculare grave.
	SK	Spôsobuje vážne poškodenie o•í.
	SL	Povzro•a hude poškodbe o•i.

H318	Language	3.3 – Serious eye damage/eye irritation, Hazard Category 1
	FI	Vaurioittaa vakavasti silmiä.
	SV	Orsakar allvarliga ögonskador.

H319	Language	3.3 – Serious eye damage/eye irritation, Hazard Category 2
	BG	
	ES	Provoca irritación ocular grave.
	CS	Zp•sobuje vážné podrážd•ní o•í.
	DA	Forårsager alvorlig øjenirritation.
	DE	Verursacht schwere Augenreizung.
	ET	Põhjustab tugevat silmade ärritust.
	EL	• •
	EN	Causes serious eye irritation.
	FR	Provoque une sévère irritation des yeux.
	GA	Ina chúis le greannú tromchúiseach don tsúil.
	IT	Provoca grave irritazione oculare.
	LV	Izraisa nopietnu acu kairin•jumu.
	LT	Sukelia smark• aki• dirginim•.
	HU	Súlyos szemirritációt okoz.
	MT	Jag•mel irritazzjoni serja lill-g•ajnejn.
	NL	Veroorzaakt ernstige oogirritatie.
	PL	Dzia•a dra•ni•co na oczy.

H319	Language	3.3 – Serious eye damage/eye irritation, Hazard Category 2
	PT	Provoca irritação ocular grave.
	RO	Provoacă o iritare gravă a ochilor.
	SK	Spôsobuje vážne podráždenie očí.
	SL	Povzroča hudo draženje oči.
	FI	Ärsyttää voimakkaasti silmiä.
	SV	Orsakar allvarlig ögonirritation.

H330	Language	3.1 – Acute toxicity (inhal.), Hazard Category 1, 2
	BG	
	ES	Mortal en caso de inhalación.
	CS	Při vdechování může způsobit smrt.
	DA	Livsfarlig ved indånding.
	DE	Lebensgefahr bei Einatmen.
	ET	Sissehingamisel surmav.
	EL	
	EN	Fatal if inhaled.
	FR	Mortel par inhalation.
	GA	Marfach má ionanálaítear.
	IT	Letale se inalato.
	LV	Ieelpojot, iestības nāve.
	LT	Mirtina kvėpus.

H330	Language	3.1 – Acute toxicity (inhal.), Hazard Category 1, 2
	HU	Belélegezve halálos.
	MT	Fatali jekk jinxtamm.
	NL	Dodelijk bij inademing.
	PL	Wdychanie grozi •mierci•.
	PT	Mortal por inalação.
	RO	Mortal în caz de inhalare.
	SK	Smrte•ný pri vdýchnutí.
	SL	Smrtno pri vdihavanju.
	FI	Tappavaa hengitettynä.
	SV	Dödligt vid inandning.

H331	Language	3.1 – Acute toxicity (inhal.), Hazard Category 3
	BG	
	ES	Tóxico en caso de inhalación.
	CS	Toxický p•i vdechování.
	DA	Giftig ved indånding.
	DE	Giftig bei Einatmen.
	ET	Sissehingamisel mürgine.
	EL	
	EN	Toxic if inhaled.
	FR	Toxique par inhalation.

H331	Language	3.1 – Acute toxicity (inhal.), Hazard Category 3
	GA	Tocsaineach má ionanálaítear.
	IT	Tossico se inalato.
	LV	Toksisks ieelpojot.
	LT	Toksiška •kv•pus.
	HU	Belélegezve mérgez•.
	MT	Tossiku jekk jinxtamm.
	NL	Giftig bij inademing.
	PL	Dzia•a toksycznie w nast•pstwie wdychania.
	PT	Tóxico por inalação.
	RO	Toxic în caz de inhalare.
	SK	Toxický pri vdýchnutí.
	SL	Strupeno pri vdihavanju.
	FI	Myrkyllistä hengitettyinä.
	SV	Giftigt vid inandning.

H332	Language	3.1 – Acute toxicity (inhal.), Hazard Category 4
	BG	
	ES	Nocivo en caso de inhalación.
	CS	Zdraví škodlivý p•i vdechování.
	DA	Farlig ved indånding.
	DE	Gesundheitsschädlich bei Einatmen.

H332	Language	3.1 – Acute toxicity (inhal.), Hazard Category 4
	ET	Sissehingamisel kahjulik.
	EL	
	EN	Harmful if inhaled.
	FR	Nocif par inhalation.
	GA	Díobhálach má ionanálaítear.
	IT	Nocivo se inalato.
	LV	Kait·gs ieelpojot.
	LT	Kenksminga ·kv·pus.
	HU	Belélegezve ártalmas.
	MT	Jag·mel il-·sara jekk jinxtamm.
	NL	Schadelijk bij inademing.
	PL	Dzia·a szkodliwe w nast·pstwie wdychania.
	PT	Nocivo por inalação.
	RO	Nociv în caz de inhalare.
	SK	Škodlivý pri vdýchnutí.
	SL	Zdravju škodljivo pri vdihavanju.
	FI	Haitallista hengitettynä.
	SV	Skadligt vid inandning.

H334	Language	3.4 – Sensitisation – Respiratory, Hazard Category 1, 1A, 1B
	BG	

H334	Language	3.4 – Sensitisation – Respiratory, Hazard Category 1, 1A, 1B
	ES	Puede provocar síntomas de alergia o asma o dificultades respiratorias en caso de inhalación.
	CS	Při vdechování může vyvolat příznaky alergie nebo astmatu nebo dýchací potíže.
	DA	Kan forårsage allergi- eller astmasymptomer eller åndedrætsbesvær ved indånding.
	DE	Kann bei Einatmen Allergie, asthmaartige Symptome oder Atembeschwerden verursachen.
	ET	Sissehingamisel võib põhjustada allergia- või astma sümptomeid või hingamisraskusi.
	EL	
	EN	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
	FR	Peut provoquer des symptômes allergiques ou d'asthme ou des difficultés respiratoires par inhalation.
	GA	D'fhéadfadh sé a bheith ina chúis le siomptóim ailléirge nó asma nó le deacrachtaí anáilithe má ionanálaítear é.
	IT	Può provocare sintomi allergici o asmatici o difficoltà respiratorie se inalato.
	LV	Ja ieelpo, var izraisīt alerģiju vai astmas simptomus, vai apgrūtināt elpošanu.
	LT	•kv•pus gali sukelti alerginį reakciją, astmos simptomus arba ap sunkinti kv•pavimą.
	HU	Belélegezve allergiás és asztmás tüneteket, és nehéz légzést okozhat.
	MT	Jista' jikkaw•a sintomi ta' aller•ija jew ta' a•ma jew diffikultajiet biex jittie•ed in-nifs jekk jinxtamm.

H334	Language	3.4 – Sensitisation – Respiratory, Hazard Category 1, 1A, 1B
	NL	Kan bij inademing allergie- of astmasymptomen of ademhalingsmoeilijkheden veroorzaken.
	PL	Mo•e powodowa• objawy alergii lub astmy lub trudno•ci w oddychaniu w nast•pstwie wdychania.
	PT	Quando inalado, pode provocar sintomas de alergia ou de asma ou dificuldades respiratórias.
	RO	Poate provoca simptome de alergie sau astm sau dificult•i de respira•ie în caz de inhalare.
	SK	Pri vdýchnutí môže vyvola• alergiu alebo príznaky astmy, alebo dýchacie •ažkosti.
	SL	Lahko povzro•i simptome alergije ali astme ali težave z dihanjem pri vdihavanju.
	FI	Voi aiheuttaa hengitettynä allergia- tai astmaoireita tai hengitysvaikeuksia.
	SV	Kan orsaka allergi- eller astmasymtom eller andningssvårigheter vid inandning.

H335	Language	3.8 – Specific target organ toxicity – Single exposure, Hazard Category 3, Respiratory tract irritation
	BG	• • • • •
	ES	Puede irritar las vías respiratorias.
	CS	M•že zp•sobit podrážd•ní dýchacích cest.
	DA	Kan forårsage irritation af luftvejene.
	DE	Kann die Atemwege reizen.
	ET	Võib põhjustada hingamisteede ärritust.
	EL	

H335	Language	3.8 – Specific target organ toxicity – Single exposure, Hazard Category 3, Respiratory tract irritation
	EN	May cause respiratory irritation.
	FR	Peut irriter les voies respiratoires.
	GA	D'fhéadfadh sé a bheith ina chúis le greannú riospráide.
	IT	Può irritare le vie respiratorie.
	LV	Var izraisīt elpce•u kairin•jumu.
	LT	Gali dirginti kv•pavimo takus.
	HU	Légúti irritációt okozhat.
	MT	Jista' jikkaw•a irritazzjoni respiratorja.
	NL	Kan irritatie van de luchtwegen veroorzaken.
	PL	Mo•e powodowa• podra•nienie dróg oddechowych.
	PT	Pode provocar irritação das vias respiratórias.
	RO	Poate provoca iritarea c•ilor respiratorii.
	SK	Môže spôsobi• podráždenie dýchacích ciest.
	SL	Lahko povzro•i draženje dihalnih poti.
	FI	Saattaa aiheuttaa hengitysteiden ärsytystä.
	SV	Kan orsaka irritation i luftvägarna.

H336	Language	3.8 – Specific target organ toxicity – Single exposure, Hazard Category 3, Narcosis
	BG	• • • • • • • • • •
	ES	Puede provocar somnolencia o vértigo.

H336	Language	3.8 – Specific target organ toxicity – Single exposure, Hazard Category 3, Narcosis
	CS	M•že zp•sobit ospalost nebo závrat•.
	DA	Kan forårsage sløvhed eller svimmelhed.
	DE	Kann Schläfrigkeit und Benommenheit verursachen.
	ET	Võib põhjustada unisust või peapööritust.
	EL	
	EN	May cause drowsiness or dizziness.
	FR	Peut provoquer somnolence ou vertiges.
	GA	D'fhéadfadh sé a bheith ina chúis le codlatacht nó le meadhrán.
	IT	Può provocare sonnolenza o vertigini.
	LV	Var izrais•t miegain•bu vai reibo•us.
	LT	Gali sukelti mieguistum• arba galvos svaigim•.
	HU	Álmosságot vagy szédülést okozhat.
	MT	Jista' jikkaw•a •edla jew sturdament.
	NL	Kan slaperigheid of duizeligheid veroorzaken.
	PL	Mo•e wywo•ywa• uczucie senno•ci lub zawroty g•owy.
	PT	Pode provocar sonolência ou vertigens.
	RO	Poate provoca somnolen•• sau ame•eal•.
	SK	Môže spôsobi• ospalos• alebo závraty.
	SL	Lahko povzro•i zaspanost ali omotico.
	FI	Saattaa aiheuttaa uneliaisuutta ja huimausta.
	SV	Kan göra att man blir dåsigt eller omtöcknad.

H340	Language	3.5 – Germ cell mutagenicity, Hazard Category 1A, 1B
	BG	
	ES	Puede provocar defectos genéticos <Indíquese la vía de exposición si se ha demostrado concluyentemente que el peligro no se produce por ninguna otra vía >.
	CS	Může vyvolat genetické poškození <uveďte cestu expozice, je-li prokázáno, že ostatní cesty expozice nejsou nebezpečné>.
	DA	Kan forårsage genetiske defekter <angiv eksponeringsvej, hvis det er endeligt påvist, at faren ikke kan frembringes ad nogen anden eksponeringsvej>.
	DE	Kann genetische Defekte verursachen <Expositionsweg angeben, sofern schlüssig belegt ist, dass diese Gefahr bei keinem anderen Expositionsweg besteht>.
	ET	Võib põhjustada geneetilisi defekte <märkida kokkupuuteviisi, kui on veenvalt tõestatud, et muud kokkupuuteviisid ei ole ohtlikud>.
	EL	
	EN	May cause genetic defects <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.
	FR	Peut induire des anomalies génétiques <indiquer la voie d'exposition s'il est formellement prouvé qu'aucune autre voie d'exposition ne conduit au même danger>.
	GA	D'fhéadfadh sé a bheith ina chúis le héalanga géiniteacha <tabhair an bealach nochta má tá sé cruthaithe go cinntitheach nach bealach nochta ar bith eile is cúis leis an nguais>.

H340	Language	3.5 – Germ cell mutagenicity, Hazard Category 1A, 1B
	IT	Può provocare alterazioni genetiche <indicare la via di esposizione se è accertato che nessun'altra via di esposizione comporta il medesimo pericolo>.
	LV	Var izraisīt •en•tiskus boj•jumus <nor•d•t iedarb•bas ce•u, ja ir nep•rprotami pier•d•ts, ka citi iedarb•bas ce•i nerada b•stam•bu>.
	LT	Gali sukelti genetinius defektus <nurodyti veikimo b•d•, jeigu •tikinamai nustatyta, kad kiti veikimo b•dai nepavojingi>.
	HU	Genetikai károsodást okozhat < meg kell adni az expozíciós útvonalat, ha meggy•z•en bizonyított, hogy más expozíciós útvonal nem okozza a veszélyt >.
	MT	Jista' jikkaw•a difetti •eneti•i <semmi l-mod ta' espo•izzjoni jekk ikun pruvat b'mod konklu•iv li l-ebda mod ta' espo•izzjoni ie•or ma jikkaw•a l-periklu>.
	NL	Kan genetische schade veroorzaken <blootstellingsroute vermelden indien afdoende bewezen is dat het gevaar bij andere blootstellingsroutes niet aanwezig is>.
	PL	Mo•e powodowa• wady genetyczne <pada• drog• nara•enia, je•eli definitywnie udowodniono, •e inna droga nara•enia nie powoduje zagro•enia>.
	PT	Pode provocar anomalias genéticas <indicar a via de exposição se existirem provas concludentes de que o perigo não decorre de nenhuma outra via de exposição>.
	RO	Poate provoca anomalii genetice <indica•i calea de expunere, dac• exist• probe concludente c• nicio alt• cale de expunere nu provoac• acest pericol>.
	SK	Môže spôsobia• genetické poškodenie <uve•te spôsob expozície, ak sa presved•ivo preukáže, že iné spôsoby expozície nevyvolávajú nebezpe•enstvo>.
	SL	Lahko povzro•i genetske okvare <navesti na•in izpostavljenosti, •e je prepri•ljivo dokazano, da noben drug na•in izpostavljenosti ne povzro•a takšne nevarnosti>.

H340	Language	3.5 – Germ cell mutagenicity, Hazard Category 1A, 1B
	FI	Saattaa aiheuttaa perimävaurioita <i><mainitaan altistumisreitti, jos on kiistatta osoitettu, että vaara ei voi aiheutua muiden altistumisreittien kautta></i> .
	SV	Kan orsaka genetiska defekter <i><ange exponeringsväg om det är definitivt bevisat att faran inte kan orsakas av några andra exponeringsvägar></i> .

H341	Language	3.5 – Germ cell mutagenicity, Hazard Category 2
	BG	<i><.....></i> <i>..... ></i> .
	ES	Se sospecha que provoca defectos genéticos <i><Indíquese la vía de exposición si se ha demostrado concluyentemente que el peligro no se produce por ninguna otra vía></i> .
	CS	Podez•ení na genetické poškození <i><uve•te cestu expozice, je-li p•esv•d•iv• prokázáno, že ostatní cesty expozice nejsou nebezpe•né></i> .
	DA	Mistænkt for at forårsage genetiske defekter <i><angiv eksponeringsvej, hvis det er endeligt påvist, at faren ikke kan frembringes ad nogen anden eksponeringsvej></i> .
	DE	Kann vermutlich genetische Defekte verursachen <i><Expositionsweg angeben, sofern schlüssig belegt ist, dass diese Gefahr bei keinem anderen Expositionsweg besteht></i> .
	ET	Arvatavasti põhjustab geneetilisi defekte <i><märkida kokkupuuteviisi, kui on veenvalt tõestatud, et muud kokkupuuteviisid ei ole ohtlikud></i> .
	EL	<i>></i> .
	EN	Suspected of causing genetic defects <i><state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard></i> .

H341	Language	3.5 – Germ cell mutagenicity, Hazard Category 2
	FR	Susceptible d'induire des anomalies génétiques <indiquer la voie d'exposition s'il est formellement prouvé qu'aucune autre voie d'exposition ne conduit au même danger>.
	GA	Ceaptar go bhféadfadh sé a bheith ina chúis le héalanga géiniteacha <tabhair an bealach nochta má tá sé cruthaithe go cinnitheach nach bealach nochta ar bith eile is cúis leis an nguais>.
	IT	Sospettato di provocare alterazioni genetiche <indicare la via di esposizione se è accertato che nessun'altra via di esposizione comporta il medesimo pericolo>.
	LV	Ir aizdomas, ka var izraisī •en•tiskus boj•jumus <nor•d•t iedarb•bas ce•u, ja ir nep•rprotami pier•d•ts, ka citi iedarb•bas ce•i nerada b•stam•bu>.
	LT	•tariama, kad gali sukelti genetinius defektus <nurodyti veikimo b•d•, jeigu •tikinamai nustatyta, kad kiti veikimo b•dai nepavojingi>.
	HU	Feltehet•en genetikai károsodást okoz < meg kell adni az expozíciós útvonalat, ha meggy•z•en bizonyított, hogy más expozíciós útvonal nem okozza a veszélyt >.
	MT	Suspettat li jikkaw•a difetti •eneti•i <semmi l-mod ta' espo•izzjoni jekk ikun pruvat b'mod konklu•iv li l-ebda mod ta' espo•izzjoni ie•or ma jikkaw•a l-periklu>.
	NL	Verdacht van het veroorzaken van genetische schade <blootstellingsroute vermelden indien afdoende bewezen is dat het gevaar bij andere blootstellingsroutes niet aanwezig is>.
	PL	Podejrzewa si•, •e powoduje wady genetyczne <pada• drog• nara•enia, je•eli definitywnie udowodniono, •e inna droga nara•enia nie powoduje zagro•enia>.
	PT	Suspeito de provocar anomalias genéticas <indicar a via de exposição se existirem provas concludentes de que o perigo não decorre de nenhuma outra via de exposição>.
	RO	Susceptibil de a provoca anomalii genetice < indica•i calea de expunere, dac• exist• probe concludente c• nicio alt• cale de expunere nu provoac• acest pericol>.

H341	Language	3.5 – Germ cell mutagenicity, Hazard Category 2
	SK	<i>Podозrenie, že spôsobuje genetické poškodenie <uve•te spôsob expozície, ak sa presved•ivo preukáže, že iné spôsoby expozície nevyvolávajú nebezpe•enstvo>.</i>
	SL	<i>Sum povzro•itve genetskih okvar <navesti na•in izpostavljenosti, •e je prepri•ljivo dokazano, da noben drug na•in izpostavljenosti ne povzro•a takšne nevarnosti>.</i>
	FI	<i>Epäillään aiheuttavan perimävaurioita <mainitaan altistumisreitti, jos on kiistatta osoitettu, että vaara ei voi aiheutua muiden altistumisreittien kautta>.</i>
	SV	<i>Misstänks kunna orsaka genetiska defekter <ange exponeringsväg om det är definitivt bevisat att faran inte kan orsakas av några andra exponeringsvägar>.</i>

H350	Language	3.6 – Carcinogenicity, Hazard Category 1A, 1B
	BG	
	ES	<i>Puede provocar cáncer <indíquese la vía de exposición si se ha demostrado concluyentemente que el peligro no se produce por ninguna otra vía>.</i>
	CS	<i>M•že vyvolat rakovinu <uve•te cestu expozice, je-li p•esv•d•iv• prokázáno, že ostatní cesty expozice nejsou nebezpe•né>.</i>
	DA	<i>Kan fremkalde kræft <angiv eksponeringsvej, hvis det er endeligt påvist, at faren ikke kan frembringes ad nogen anden eksponeringsvej>.</i>
	DE	<i>Kann Krebs erzeugen <Expositionsweg angeben, sofern schlüssig belegt ist, dass diese Gefahr bei keinem anderen Expositionsweg besteht>.</i>
	ET	<i>Võib põhjustada vähktõbe <märkida kokkupuuteviisi, kui on veenvalt tõestatud, et muud kokkupuuteviisid ei ole ohtlikud>.</i>

H350	Language	3.6 – Carcinogenicity, Hazard Category 1A, 1B
	EL	>.
	EN	May cause cancer <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.
	FR	Peut provoquer le cancer <indiquer la voie d'exposition s'il est formellement prouvé qu'aucune autre voie d'exposition ne conduit au même danger>.
	GA	D'fhéadfadh sé a bheith ina chúis le hailse <tabhair an bealach nochta má tá sé cruthaithe go cinntitheach nach bealach nochta ar bith eile is cúis leis an nguais>.
	IT	Può provocare il cancro<indicare la via di esposizione se è accertato che nessun'altra via di esposizione comporta il medesimo pericolo>.
	LV	Var izraisīt v•zi <nor•d•t iedarb•bas ce•u, ja ir nep•rprotami pier•d•ts, ka citi iedarb•bas ce•i nerada b•stam•bu>.
	LT	Gali sukelti v•ž• <nurodyti veikimo b•d•, jeigu •tikinamai nustatyta, kad kiti veikimo b•dai nepavojingi>.
	HU	Rákot okozhat < meg kell adni az expozíciós útvonalat, ha meggy•z•en bizonyított, hogy más expozíciós útvonal nem okozza a veszélyt >.
	MT	Jista' jikkaw•a l•kan•er <semmi l•mod ta' espo•izzjoni jekk ikun pruvat b'mod konkl•iv li l•ebda mod ta' espo•izzjoni ie•or ma jikkaw•a l•periklu>.
	NL	Kan kanker veroorzaken <blootstellingsroute vermelden indien afdoende bewezen is dat het gevaar bij andere blootstellingsroutes niet aanwezig is>
	PL	Mo•e powodowa• raka <poda• drog• nara•enia, je•eli definitywnie udowodniono, •e inna droga nara•enia nie powoduje zagro•enia>.
	PT	Pode provocar cancro <indicar a via de exposição se existirem provas concludentes de que o perigo não decorre de nenhuma outra via de exposição>.

H350	Language	3.6 – Carcinogenicity, Hazard Category 1A, 1B
	RO	Poate provoca cancer <indica•i calea de expunere, dac• exist• probe concludente c• nicio alt• cale de expunere nu provoac• acest pericol>.
	SK	Môže spôsobi• rakovinu <uve•te spôsob expozície, ak sa presved•ivo preukáže, že iné spôsoby expozície nevyvolávajú nebezpe•enstvo>.
	SL	Lahko povzro•i raka <navesti na•in izpostavljenosti, •e je prepri•ljivo dokazano, da noben drug na•in izpostavljenosti ne povzro•a takšne nevarnosti>.
	FI	Saattaa aiheuttaa syöpää <mainitaan altistumisreitti, jos on kiistatta osoitettu, että vaara ei voi aiheutua muiden altistumisreittien kautta>.
	SV	Kan orsaka cancer <ange exponeringsväg om det är definitivt bevisat att faran inte kan orsakas av några andra exponeringsvägar>.

H351	Language	3.6 – Carcinogenicity, Hazard Category 2
	BG	••
	ES	Se sospecha que provoca cáncer <indíquese la vía de exposición si se se ha demostrado concluyentemente que el peligro no se produce por ninguna otra vía>.
	CS	Podez•ení na vyvolání rakoviny <uve•te cestu expozice, je-li p•esv•d•iv• prokázáno, že ostatní cesty expozice nejsou nebezpe•né>.
	DA	Mistænkt for at fremkalde kræft <angiv eksponeringsvej, hvis det er endeligt påvist, at faren ikke kan frembringes ad nogen anden eksponeringsvej>.
	DE	Kann vermutlich Krebs erzeugen <Expositionsweg angeben, sofern schlüssig belegt ist, dass diese Gefahr bei keinem anderen Expositionsweg besteht>.

H351	Language	3.6 – Carcinogenicity, Hazard Category 2
	ET	Arvatavasti põhjustab vähktõbe <märkida kokkupuuteviis, kui on veenvalt tõestatud, et muud kokkupuuteviisid ei ole ohtlikud>.
	EL	>.
	EN	Suspected of causing cancer <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.
	FR	Susceptible de provoquer le cancer <indiquer la voie d'exposition s'il est formellement prouvé qu'aucune autre voie d'exposition ne conduit au même danger>.
	GA	Ceaptar go bhféadfadh sé a bheith ina chúis le hailse <tabhair an bealach nochta má tá sé cruthaithe go cinntitheach nach bealach nochta ar bith eile is cúis leis an nguais>.
	IT	Sospettato di provocare il cancro <indicare la via di esposizione se è accertato che nessun'altra via di esposizione comporta il medesimo pericolo>.
	LV	Ir aizdomas, ka var izraisīt v•zi <nor•d•t iedarb•bas ce•u, ja ir nep•rprotami pier•d•ts, ka citi iedarb•bas ce•i nerada b•stam•bu>.
	LT	•tariama, kad sukelia v•ž• <nurodyti veikimo b•d•, jeigu •tikinamai nustatyta, kad kiti veikimo b•dai nepavojingi>.
	HU	Feltehet•en rákot okoz < meg kell adni az expozíciós útvonalat, ha meggy•z•en bizonyított, hogy más expozíciós útvonal nem okozza a veszélyt >.
	MT	Suspettat li jikkaw•a l-kan•er <ara l-mod ta' espo•izzjoni jekk ikun pruvat b'mod konklu•iv li l-ebda mod ta' espo•izzjoni ie•or ma jikkaw•a l-periklu >.
	NL	Verdacht van het veroorzaken van kanker <blootstellingsroute vermelden indien afdoende bewezen is dat het gevaar bij andere blootstellingsroutes niet aanwezig is>.

H351	Language	3.6 – Carcinogenicity, Hazard Category 2
	PL	<i>Podejrzewa si•, •e powoduje raka <pada• drog• nara•enia, je•eli definitywnie udowodniono, •e inna droga nara•enia nie powoduje zagro•enia>.</i>
	PT	<i>Suspeito de provocar cancro <indicar a via de exposiçãõ se existirem provas concludentes de que o perigo nãõ decorre de nenhuma outra via de exposiçãõ>.</i>
	RO	<i>Susceptibil de a provoca cancer <indica•i calea de expunere, dac• exist• probe concludente c• nicio alt• cale de expunere nu provoac• acest pericol>.</i>
	SK	<i>Podozrenie, že spôsobuje rakovinu <uve•te spôsob expozície, ak sa presved•ivo preukáže, že iné spôsoby expozície nevyvolávajú nebezpe•enstvo>.</i>
	SL	<i>Sum povzro•itve raka <navesti na•in izpostavljenosti, •e je prepri•ljivo dokazano, da noben drug na•in izpostavljenosti ne povzro•a takšne nevarnosti>.</i>
	FI	<i>Epäillään aiheuttavan syöpää <mainitaan altistumisreitti, jos on kiistatta osoitettu, että vaara ei voi aiheutua muiden altistumisreittien kautta>.</i>
	SV	<i>Misstänks kunna orsaka cancer <ange exponeringsväg om det är definitivt bevisat att faran inte kan orsakas av några andra exponeringsvägar>.</i>

H360	Language	3.7 – Reproductive toxicity, Hazard Category 1A, 1B
	BG	••
	ES	<i>Puede perjudicar la fertilidad o dañar al feto <indíquese el efecto específico si se conoce> <indíquese la vía de exposición si se ha demostrado concluyentemente que el peligro no se produce por ninguna otra vía>.</i>

H360	Language	3.7 – Reproductive toxicity, Hazard Category 1A, 1B
	CS	M•že poškodit reproduk•ní schopnost nebo plod v t•le matky <uve•te specifický ú•inek, je-li znám> <uve•te cestu expozice, je-li p•esv•d•iv• prokázáno, že ostatní cesty expozice nejsou nebezpe•né>.
	DA	Kan skade forplantningsevnen eller det ufødte barn <angiv specifik effekt, hvis kendt> <angiv eksponeringsvej, hvis det er endeligt påvist, at faren ikke kan frembringes ad nogen anden eksponeringsvej>.
	DE	Kann die Fruchtbarkeit beeinträchtigen oder das Kind im Mutterleib schädigen <konkrete Wirkung angeben, sofern bekannt> <Expositionsweg angeben, sofern schlüssig belegt ist, dass die Gefahr bei keinem anderen Expositionsweg besteht>.
	ET	Võib kahjustada viljakust või loodet <märkida spetsiifiline toime, kui see on teada> <märkida kokkupuuteviisi, kui on veenvalt tõestatud, et muud kokkupuuteviisid ei ole ohtlikud>.
	EL	<
	EN	May damage fertility or the unborn child <state specific effect if known > <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.
	FR	Peut nuire à la fertilité ou au fœtus <indiquer l'effet spécifique s'il est connu> <indiquer la voie d'exposition s'il est formellement prouvé qu'aucune autre voie d'exposition ne conduit au même danger>.
	GA	D'fhéadfadh sé damáiste a dhéanamh do thorthúlacht nó don leanbh sa bhroinn <tabhair an tsainéifeacht más eol > <tabhair an bealach nochta má tá sé cruthaithe go cinntitheach nach bealach nochta ar bith eile is cúis leis an nguais>.
	IT	Può nuocere alla fertilità o al feto <indicare l'effetto specifico, se noto><indicare la via di esposizione se è accertato che nessun'altra via di esposizione comporta il medesimo pericolo>.

H360	Language	3.7 – Reproductive toxicity, Hazard Category 1A, 1B
	LV	Var kait•t augl•bai vai nedzimušajam b•rnam <nor•d•t•pašo ietekmi, ja t• ir zin•ma> <nor•d•t iedarb•bas ce•u, ja ir nep•rprotami pier•d•ts, ka citi iedarb•bas ce•i nerada b•stam•bu>.
	LT	Gali pakenkti vaisingumui arba negimusiam vaikui <nurodyti konkret• poveik•, jeigu žinomas> <nurodyti veikimo b•d•, jeigu •tikinamai nustatyta, kad kiti veikimo b•dai nepavojingi>.
	HU	Károsíthatja a termékenységet vagy a születend• gyermeket < ha ismert, meg kell adni a konkrét hatást > < meg kell adni az expozíciós útvonalat, ha meggy•z•en bizonyított, hogy más expozíciós útvonal nem okozza a veszélyt >.
	MT	Jista' jag•mel •sara lill-fertilità jew lit-tarbija li g•adha fil-•uf <semmi l-effett spe•ifiku jekk ikun mag•ruf> <semmi l-mod ta' espo•izzjoni jekk ikun pruvat b'mod konklu•iv li l-ebda mod ta' espo•izzjoni ie•or ma jikkaw•a l-periklu>.
	NL	Kan de vruchtbaarheid of het ongeboren kind schaden <specifiek effect vermelden indien bekend> <blootstellingsroute vermelden indien afdoende bewezen is dat het gevaar bij andere blootstellingsroutes niet aanwezig is>.
	PL	Mo•e dzia•a• szkodliwie na p•odno•• lub na dziecko w •onie matki <poda• szczególny skutek, je•eli jest znany> <poda• drog• nara•enia, je•eli definitywnie udowodniono, •e inne drogi nara•enia nie stwarzaj• zagro•enia>.
	PT	Pode afectar a fertilidade ou o nascituro <indicar o efeito específico se este for conhecido> <indicar a via de exposição se existirem provas concludentes de que o perigo não decorre de nenhuma outra via de exposição>.
	RO	Poate d•una fertilit•ii sau f•tului <indica•i efectul specific, dac• este cunoscut><indica•i calea de expunere, dac• exist• probe concludente c• nicio alt• cale de expunere nu provoac• acest pericol>.
	SK	Môže spôsobi• poškodenie plodnosti alebo nenarodeného die•a•a <uve•te konkrétny ú•inok, ak je známy > <uve•te spôsob expozície, ak sa presved•ivo preukáže, že iné spôsoby expozície nevyvolávajú nebezpe•enstvo>.

H360	Language	3.7 – Reproductive toxicity, Hazard Category 1A, 1B
	SL	Lahko škoduje plodnosti ali nerojenemu otroku <i><navesti posebni u•inek, •e je znan> <navesti na•in izpostavljenosti, •e je prepri•ljivo dokazano, da noben drug na•in izpostavljenosti ne povzro•a takšne nevarnosti></i> .
	FI	Saattaa heikentää hedelmällisyyttä tai vaurioittaa sikiötä <i><mainitaan tiedetty spesifinen vaikutus> <mainitaan altistumisreitti, jos on kiistatta osoitettu, että vaara ei voi aiheutua muiden altistumisreittien kautta></i> .
	SV	Kan skada fertiliteten eller det ofödda barnet <i><ange specifik effekt om denna är känd> <ange exponeringsväg om det är definitivt bevisat att faran inte kan orsakas av några andra exponeringsvägar></i> .

H361	Language	3.7 – Reproductive toxicity, Hazard Category 2
	BG	••••• •
	ES	Se sospecha que perjudica la fertilidad o daña al feto <i><indíquese el efecto específico si se conoce> <indíquese la vía de exposición si se ha demostrado concluyentemente que el peligro no se produce por ninguna otra vía></i> .
	CS	Podez•en•í na poškození reproduk•ní schopnosti nebo plodu v t•le matky <i><uve•te specifický ú•inek, je-li znám> <uve•te cestu expozice, je-li p•esv•div• prokázáno, že ostatní cesty expozice nejsou nebezpe•né></i> .
	DA	Mistænkt for at skade forplantningsevnen eller det ufødte barn <i><angiv specifik effekt, hvis kendt> <angiv eksponeringsvej, hvis det er endeligt påvist, at faren ikke kan frembringes ad nogen anden eksponeringsvej></i> .
	DE	Kann vermutlich die Fruchtbarkeit beeinträchtigen oder das Kind im Mutterleib schädigen <i><konkrete Wirkung angebe,n sofern bekannt > <Expositionsweg angeben, sofern schlüssig belegt ist, dass die Gefahr bei keinem anderen Expositionsweg besteht></i>

H361	Language	3.7 – Reproductive toxicity, Hazard Category 2
	ET	Arvatavasti kahjustab viljakust või loodet <märkida spetsiifiline toime, kui see on teada> <märkida kokkupuuteviis, kui on veenvalt tõestatud, et muud kokkupuuteviisid ei ole ohtlikud>.
	EL	< > • >.
	EN	Suspected of damaging fertility or the unborn child <state specific effect if known> <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.
	FR	Susceptible de nuire à la fertilité ou au fœtus <indiquer l'effet s'il est connu> <indiquer la voie d'exposition s'il est formellement prouvé qu'aucune autre voie d'exposition ne conduit au même danger>.
	GA	Ceaptar go bhféadfadh sé damáiste a dhéanamh do thorthúlacht nó don leanbh sa bhroinn <tabhair an tsainéifeacht más eol > <tabhair an bealach nochta má tá sé cruthaithe go cinntitheach nach bealach nochta ar bith eile is cúis leis an nguas>.
	IT	Sospettato di nuocere alla fertilità o al feto <indicare l'effetto specifico, se noto> <indicare la via di esposizione se è accertato che nessun'altra via di esposizione comporta il medesimo pericolo>.
	LV	Ir aizdomas, ka var kait•t augl•bai vai nedzimušajam b•rnam <nor•d•t•pašo ietekmi, ja t• ir zin•ma> <nor•d•t iedarb•bas ce•u, ja ir nep•rprotami pier•d•ts, ka citi iedarb•bas ce•i nerada b•stam•bu>.
	LT	•tariama, kad kenkia vaisingumui arba negimusiam vaikui <nurodyti konkret• poveik•, jeigu žinomas> <nurodyti veikimo b•d•, jeigu •tikinamai nustatyta, kad kiti veikimo b•dai nepavojingi>.
	HU	Feltehet•en károsítja a termékenységet vagy a születend•gyermeket < ha ismert, meg kell adni a konkrét hatást > < meg kell adni az expozíciós útvonalat, ha meggy•z•en bizonyított, hogy más expozíciós útvonal nem okozza a veszélyt >.

H361	Language	3.7 – Reproductive toxicity, Hazard Category 2
	MT	Suspettat li jag•mel •sara lill-fertilità jew lit-tarbija li g•adha fil- •uf <semmi l-effett spe•ifiku jekk ikun mag•ruf> <semmi l-mod ta' espo•izzjoni jekk ikun pruvat b'mod konklu•iv li l-ebda mod ta' espo•izzjoni ie•or ma jikkaw•a l-periklu >.
	NL	Kan mogelijk de vruchtbaarheid of het ongeboren kind schaden <specifiek effect vermelden indien bekend> <blootstellingsroute vermelden indien afdoende bewezen is dat het gevaar bij andere blootstellingsroutes niet aanwezig is>.
	PL	Podejrzenia si•, •e dzia•a szkodliwie na p•odno•• lub na dziecko w •onie matki <poda• szczeg•ólny skutek, je•eli jest znany> <poda• drog• nara•enia, je•eli definitywnie udowodniono, •e inne drogi nara•enia nie stwarzaj• zagro•enia>.
	PT	Suspeito de afectar a fertilidade ou o nascituro <indicar o efeito específico se este for conhecido> <indicar a via de exposição se existirem provas concludentes de que o perigo não decorre de nenhuma outra via de exposição>.
	RO	Susceptibil de a d•una fertilit•ii sau f•tului <indica•i efectul specific, dac• este cunoscut><indica•i calea de expunere, dac• exist• probe concludente c• nicio alt• cale de expunere nu provoac• acest pericol>.
	SK	Podozrenie, že spôsobuje poškodenie plodnosti alebo nenarodeného die•a•a <uve•te konkrétny ú•inok, ak je známy > <uve•te spôsob expozície, ak sa presved•ivo preukáže, že iné spôsoby expozície nevyvolávajú nebezpe•enstvo>.
	SL	Sum škodljivosti za plodnost ali nerojenega otroka <navesti posebni u•inek, •e je znan> <navesti na•in izpostavljenosti, •e je prepri•ljivo dokazano, da noben drug na•in izpostavljenosti ne povzro•a takšne nevarnosti>.
	FI	Epäillään heikentävän hedelmällisyyttä tai vaurioittavan sikiötä <mainitaan tiedetty spesifinen vaikutus> <mainitaan altistumisreitti, jos on kiistatta osoitettu, että vaara ei voi aiheutua muiden altistumisreittien kautta>.
	SV	Misstänks kunna skada fertiliteten eller det ofödda barnet <ange specifik effekt om denna är känd> <ange exponeringsväg om det är definitivt bevisat att faran inte kan orsakas av några andra exponeringsvägar>.

H362	Language	3.7 – Reproductive toxicity, Additional category, Effects on or via lactation
	BG	
	ES	Puede perjudicar a los niños alimentados con leche materna.
	CS	M•že poškodit kojence prost•ednictvím mate•ského mléka.
	DA	Kan skade børn, der ammes.
	DE	Kann Säuglinge über die Muttermilch schädigen.
	ET	Võib kahjustada rinnaga toidetavat last.
	EL	
	EN	May cause harm to breast-fed children.
	FR	Peut être nocif pour les bébés nourris au lait maternel.
	GA	D'fhéadfadh sé díobháil a dhéanamh do leanaí diúil.
	IT	Può essere nocivo per i lattanti allattati al seno.
	LV	Var rad•t kait•jumu ar kr•ti barotam b•rnam.
	LT	Gali pakenkti žindomam vaikui.
	HU	A szoptatott gyermeket károsíthatja.
	MT	Jista' jag•mel •sara lit•tfal imreddg•a.
	NL	Kan schadelijk zijn via borstvoeding.
	PL	Mo•e dzia•a• szkodliwie na dzieci karmione piersi•.
	PT	Pode ser nocivo para as crianças alimentadas com leite materno.
	RO	Poate d•una copiilor al•pta•i la sân.
	SK	Môže spôsobi• poškodenie u doj•ených detí.

H362	Language	3.7 – Reproductive toxicity, Additional category, Effects on or via lactation
	SL	Lahko škoduje dojenim otrokom.
	FI	Saattaa aiheuttaa haittaa rintaruokinnassa oleville lapsille.
	SV	Kan skada spädbarn som ammas.

H370	Language	3.8 – Specific target organ toxicity – single exposure, Hazard Category 1
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BG

H370	Language	3.8 – Specific target organ toxicity – single exposure, Hazard Category 1
	EN	Causes damage to organs <i><or state all organs affected, if known></i> <i><state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard></i> .
	FR	Risque avéré d'effets graves pour les organes <i><ou indiquer tous les organes affectés, s'ils sont connus></i> <i><indiquer la voie d'exposition s'il est formellement prouvé qu'aucune autre voie d'exposition ne conduit au même danger></i> .
	GA	Déanann sé damáiste d'orgáin <i><nó tabhair na horgáin go léir a bhualtear, más eol></i> <i><tabhair an bealach nochta má tá sé cruthaithe go cinntitheach nach bealach nochta ar bith eile is cúis leis an nguais></i> .
	IT	Provoca danni agli organi <i><o indicare tutti gli organi interessati, se noti></i> <i><indicare la via di esposizione se è accertato che nessun'altra via di esposizione comporta il medesimo pericolo></i> .
	LV	Rada org•nu boj•jumus <i><vai nor•d•t visus skartos org•nus, ja tie ir zin•mi></i> <i><nor•d•t iedarb•bas ce•u, ja ir nep•rprotami pier•d•ts, ka citi iedarb•bas ce•i nerada b•stam•bu></i> .
	LT	Kenkia organams <i><arba nurodyti visus veikiamus organus, jeigu žinomi></i> <i><nurodyti veikimo b•d•, jeigu •tikinamai nustatyta, kad kiti veikimo b•dai nepavojingi></i> .
	HU	Károsítja a szerveket <i>< vagy meg kell adni az összes érintett szervet, ha ismertek ></i> <i>< meg kell adni az expozíciós útvonalat, ha meggy•z•en bizonyított, hogy más expozíciós útvonal nem okozza a veszélyt ></i> .
	MT	Jag•mel •sara lill-organi <i><jew semmi l-organi kollha affettwati, jekk ikunu mag•rufa></i> <i><semmi l-mod ta' espo•izzjoni jekk ikun pruvat b'mod konklu•iv li l-ebda mod ta' espo•izzjoni ie•or ma jikkaw•a l-periklu></i> .
	NL	Veroorzaakt schade aan organen <i><of alle betrokken organen vermelden indien bekend></i> <i><blootstellingsroute vermelden indien afdoende bewezen is dat het gevaar bij andere blootstellingsroutes niet aanwezig is></i> .
	PL	Powoduje uszkodzenie narz•dów <i><poda• szczególny skutek, je•li jest znany></i> <i><poda• drog• nara•enia, je•eli udowodniono, •e inne drogi nara•enia nie stwarzaj• zagro•enia></i> .

H370	Language	3.8 – Specific target organ toxicity – single exposure, Hazard Category 1
	PT	<i>Afecta os órgãos <ou indicar todos os órgãos afectados, se forem conhecidos> <indicar a via de exposição se existirem provas concludentes de que o perigo não decorre de nenhuma outra via de exposição>.</i>
	RO	<i>Provoacă• leziuni ale organelor <sau indica•i toate organele afectate, dac• sunt cunoscute> <indica•i calea de expunere, dac• exist• probe concludente c• nicio alt• cale de expunere nu provoacă• acest pericol>.</i>
	SK	<i>Spôsobuje poškodenie orgánov <alebo uve•te všetky zasiahnuté orgány, ak sú známe> <uve•te spôsob expozície, ak sa presved•ivo preukáže, že iné spôsoby expozície nevyvolávajú nebezpe•enstvo>.</i>
	SL	<i>Škoduje organom <ali navesti vse organe, na katere vpliva, •e je znano> <navesti na•in izpostavljenosti, •e je prepri•ljivo dokazano, da noben drug na•in izpostavljenosti ne povzro•a takšne nevarnosti>.</i>
	FI	<i>Vahingoittaa elimiä <tai mainitaan kaikki tiedetyt kohde-elimet> <mainitaan altistumisreitti, jos on kiistatta osoitettu, että vaara ei voi aiheutua muiden altistumisreittien kautta>.</i>
	SV	<i>Orsakar organskador <eller ange vilka organ som påverkas om detta är känt> <ange exponeringsväg om det är definitivt bevisat att faran inte kan orsakas av några andra exponeringsvägar>.</i>

H371	Language	3.8 – Specific target organ toxicity – Single exposure, Hazard Category 2
	BG	<i>< ></i> <i>..... >.</i>
	ES	<i>Puede provocar daños en los órganos <o indíquense todos los órganos afectados, si se conocen> <indíquese la vía de exposición si se ha demostrado concluyentemente que el peligro no se produce por ninguna otra vía>.</i>

H371	Language	3.8 – Specific target organ toxicity – Single exposure, Hazard Category 2
	CS	Může způsobit poškození orgánů <nebo uvést všechny postižené orgány, jsou-li známy> <uveďte cestu expozice, je-li prokázáno, že ostatní cesty expozice nejsou nebezpečné>.
	DA	Kan forårsage organskader <eller angiv alle berørte organer, hvis de kendes> <angiv eksponeringsvej, hvis det er endeligt påvist, at faren ikke kan frembringes ad nogen anden eksponeringsvej>.
	DE	Kann die Organe schädigen <oder alle betroffenen Organe nennen, sofern bekannt> <Expositionsweg angeben, sofern schlüssig belegt ist, dass diese Gefahr bei keinem anderen Expositionsweg besteht>.
	ET	Võib kahjustada elundeid <või märkida kõik mõjutatud elundid, kui need on teada> <märkida kokkupuuteviisi, kui on veenvalt tõestatud, et muud kokkupuuteviisid ei ole ohtlikud>.
	EL	> < >.
	EN	May cause damage to organs <or state all organs affected, if known> <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.
	FR	Risque présumé d'effets graves pour les organes <ou indiquer tous les organes affectés, s'ils sont connus> <indiquer la voie d'exposition s'il est formellement prouvé qu'aucune autre voie d'exposition ne conduit au même danger>.
	GA	D'fhéadfadh damáiste a dhéanamh d'orgáin <nó tabhair na horgáin go léir a bhuailtear, más eol> <tabhair an bealach nochta má tá sé cruthaithe go cinntitheach nach bealach nochta ar bith eile is cúis leis an nguais>.
	IT	Può provocare danni agli organi <o indicare tutti gli organi interessati, se noti> <indicare la via di esposizione se è accertato che nessun'altra via di esposizione comporta il medesimo pericolo>.

H371	Language	3.8 – Specific target organ toxicity – Single exposure, Hazard Category 2
	LV	Var izraisīt orgānu bojājumus <vai norādīt visus skartos orgānus, ja tie ir zināmi> <norādīt iedarbības ceļu, ja ir neprotami pierādīts, ka citi iedarbības ceļi nerada bīstamību>.
	LT	Gali pakenkti organams <arba nurodyti visus veikiamus organus, jeigu žinomi> <nurodyti veikimo būdas, jeigu tikinamai nustatyta, kad kiti veikimo būdai nepavojingi>.
	HU	Károsíthatja a szerveket < vagy meg kell adni az összes érintett szervet, ha ismertek > < meg kell adni az expozíciós útvonalat, ha meggyőzően bizonyított, hogy más expozíciós útvonal nem okozza a veszélyt >.
	MT	Jista' jikkaw•a sara lill-organi <jew semmi l-organi kollha affettwati, jekk ikunu mag•rufa> <semmi l-mod ta' espo•izzjoni jekk ikun pruvat b'mod konkluziv li l-ebda mod ta' espo•izzjoni ie•or ma jikkaw•a l-periklu>.
	NL	Kan schade aan organen <of alle betrokken organen vermelden indien bekend> veroorzaken <blootstellingsroute vermelden indien afdoende bewezen is dat het gevaar bij andere blootstellingsroutes niet aanwezig is>.
	PL	Może powodować uszkodzenie narządów <podawać wszystkie znane narządy, których to dotyczy> <podawać drogi narażenia, jeżeli udowodniono, że inne drogi narażenia nie stwarzają zagrożenia>.
	PT	Pode afectar os órgãos <ou indicar todos os órgãos afectados, se forem conhecidos> <indicar a via de exposição se existirem provas concludentes de que o perigo não decorre de nenhuma outra via de exposição>.
	RO	Poate provoca leziuni ale organelor <sau indicați toate organele afectate, dacă sunt cunoscute> <indicați calea de expunere, dacă există probe concludente că nicio altă cale de expunere nu provoacă acest pericol>.
	SK	Môže spôsobiť poškodenie orgánov <alebo uveďte všetky zasiahnuté orgány, ak sú známe> <uveďte spôsoby expozície, ak sa presvedčivo preukáže, že iné spôsoby expozície nevyvolávajú nebezpečenstvo>.

H371	Language	3.8 – Specific target organ toxicity – Single exposure, Hazard Category 2
	SL	Lahko škoduje organom <ali navesti vse organe, na katere vpliva, •e je znano> <navesti na•in izpostavljenosti, •e je prepri•ljivo dokazano, da noben drug na•in izpostavljenosti ne povzro•a takšne nevarnosti>.
	FI	Saattaa vahingoittaa elimiä <tai mainitaan kaikki tiedetyt kohde-elimet> <mainitaan altistumisreitti, jos on kiistatta osoitettu, että vaara ei voi aiheutua muiden altistumisreittien kautta>.
	SV	Kan orsaka organskador <eller ange vilka organ som påverkas om detta är känt> <ange exponeringsväg om det är definitivt bevisat att faran inte kan orsakas av några andra exponeringsvägar>.

H372	Language	3.9 – Specific target organ toxicity – Repeated exposure, Hazard Category 1
	BG	•••••••• >.
	ES	Provoca daños en los órganos <indíquense todos los órganos afectados, si se conocen> tras exposiciones prolongadas o repetidas <indíquese la vía de exposición si se ha demostrado concluyentemente que el peligro no se produce por ninguna otra vía>.
	CS	Zp•sobuje poškození orgán• <nebo uvést všechny postižené orgány, jsou-li známy> p•i prodloužené nebo opakované expozici <uve•te cestu expozice, je-li p•esv•d•iv• prokázáno, že ostatní cesty expozice nejsou nebezpe•né>.
	DA	Forårsager organskader <eller angiv alle berørte organer, hvis de kendes> ved længerevarende eller gentagen eksponering <angiv eksponeringsvej, hvis det er endeligt påvist, at faren ikke kan frembringes ad nogen anden eksponeringsvej>.

H372	Language	3.9 – Specific target organ toxicity – Repeated exposure, Hazard Category 1
	DE	Schädigt die Organe <i><alle betroffenen Organe nennen></i> bei längerer oder wiederholter Exposition <i><Expositionsweg angeben, wenn schlüssig belegt ist, dass diese Gefahr bei keinem anderen Expositionsweg besteht></i> .
	ET	Kahjustab elundeid <i><või märkida kõik mõjutatud elundid, kui need on teada></i> pikaajalisel või korduval kokkupuutel <i><märkida kokkupuuteviisi, kui on veenvalt tõestatud, et muud kokkupuuteviisid ei ole ohtlikud></i> .
	EL	>.
	EN	Causes damage to organs <i><or state all organs affected, if known></i> through prolonged or repeated exposure <i><state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard></i> .
	FR	Risque avéré d'effets graves pour les organes <i><indiquer tous les organes affectés, s'ils sont connus></i> à la suite d'expositions répétées ou d'une exposition prolongée <i><indiquer la voie d'exposition s'il est formellement prouvé qu'aucune autre voie d'exposition ne conduit au même danger></i> .
	GA	Déanann damáiste d'orgáin <i><nó tabhair na horgáin go léir a bhualtear, más eol></i> trí nochtadh fada nó ilnochtadh <i><tabhair an bealach noхта má tá sé cruthaithe go cinntitheach nach bealach noхта ar bith eile is cúis leis an nguais></i> .
	IT	Provoca danni agli organi <i><o indicare tutti gli organi interessati, se noti></i> in caso di esposizione prolungata o ripetuta <i><indicare la via di esposizione se è accertato che nessun'altra via di esposizione comporta il medesimo pericolo></i> .
	LV	Izraisa org•nu boj•jumus <i><vai nor•d•t visus skartos org•nus, ja tie ir zin•mi></i> ilgstošas vai atk•rtotas iedarb•bas rezult•t• <i><nor•d•t iedarb•bas ce•u, ja ir nep•rprotami pier•d•ts, ka citi iedarb•bas ce•i nerada b•stam•bu></i> .

H372	Language	3.9 – Specific target organ toxicity – Repeated exposure, Hazard Category 1
	LT	Kenkia organams <arba nurodyti visus veikiamus organus, jeigu žinoma>, jeigu medžiaga veikia ilgai arba kartotinai <nurodyti veikimo b•d•, jeigu •tikinamai nustatyta, kad kiti veikimo b•dai nepavojingi>.
	HU	Ismétl•d• vagy hosszabb expozíció esetén < meg kell adni az expozíciós útvonalat, ha meggy•z•en bizonyított, hogy más expozíciós útvonal nem okozza a veszélyt > károsítja a szerveket < vagy meg kell adni az összes érintett szervet, ha ismertek >.
	MT	Jikkaw•a •sara lill-organi <jew semmi l-organi kollha affettwati, jekk ikunu mag•rufa> min•abba espo•izzjoni fit-tul jew ripetuta <semmi l-mod ta' espo•izzjoni jekk ikun pruvat b'mod konklu•iv li l-ebda mod ta' espo•izzjoni ie•or ma jikkaw•a l-periklu>.
	NL	Veroorzaakt schade aan organen <of alle betrokken organen vermelden indien bekend> bij langdurige of herhaalde blootstelling <blootstellingsroute vermelden indien afdoende bewezen is dat het gevaar bij andere blootstellingsroutes niet aanwezig is>.
	PL	Powoduje uszkodzenie narz•dów <poda• wszystkie znane narz•dy, których to dotyczy > poprzez d•ugotrwa•e lub powtarzane nara•enie <poda• drog• nara•enia, je•eli udowodniono, •e inne drogi nara•enia nie stwarzaj• zagro•enia>.
	PT	Afecta os órgãos <ou indicar todos os órgãos afectados, se forem conhecidos> após exposição prolongada ou repetida <indicar a via de exposição se existirem provas concludentes de que o perigo não decorre de nenhuma outra via de exposição>.
	RO	Provoac• leziuni ale organelor <sau indica•i toate organele afectate, dac• sunt cunoscute> în caz de expunere prelungit• sau repetat• <indica•i calea de expunere, dac• exist• probe concludente c• nicio alt• cale de expunere nu provoac• acest pericol>.
	SK	Spôsobuje poškodenie orgánov <alebo uve•te všetky zasiahnuté orgány, ak sú známe> pri dlhšej alebo opakovanej expozícii <uve•te spôsob expozície, ak sa presved•ivo preukáže, že iné spôsoby expozície nevyvolávajú nebezpe•enstvo>.

H372	Language	3.9 – Specific target organ toxicity – Repeated exposure, Hazard Category 1
	SL	Škoduje organom <ali navesti vse organe, na katere vpliva, •e je znano> pri dolgotrajni ali ponavljajo•i se izpostavljenosti <navesti na•in izpostavljenosti, •e je prepri•ljivo dokazano, da noben drug na•in izpostavljenosti ne povzro•a takšne nevarnosti>.
	FI	Vahingoittaa elimiä <tai mainitaan kaikki tiedetyt kohde-elimet> pitkäaikaisessa tai toistuvassa altistumisessa <mainitaan altistumisreitti, jos on kiistatta osoitettu, että vaara ei voi aiheutua muiden altistumisreittien kautta>.
	SV	Orsakar organskador <eller ange vilka organ som påverkas om detta är känt> genom lång eller upprepad exponering <ange exponeringsväg om det är definitivt bevisat att faran inte kan orsakas av några andra exponeringsvägar>.

H373	Language	3.9 – Specific target organ toxicity – Repeated exposure, Hazard Category 2
	BG	< < >.
	ES	Puede provocar daños en los órganos <indíquense todos los órganos afectados, si se conocen> tras exposiciones prolongadas o repetidas <indíquese la vía de exposición si se ha demostrado concluyentemente que el peligro no se produce por ninguna otra vía>.
	CS	M•že zp•sobit poškození orgán• <nebo uvést všechny postižené orgány, jsou-li známy> p•i prodloužené nebo opakované expozici <uve•te cestu expozice, je-li p•esv•div• prokázáno, že ostatní cesty expozice nejsou nebezpe•né>.
	DA	Kan forårsage organskader <eller angiv alle berørte organer, hvis de kendes> ved længerevarende eller gentagen eksponering <angiv eksponeringsvej, hvis det er endeligt påvist, at faren ikke kan frembringes ad nogen anden eksponeringsvej>.

H373	Language	3.9 – Specific target organ toxicity – Repeated exposure, Hazard Category 2
	DE	Kann die Organe schädigen <i><alle betroffenen Organe nennen, sofern bekannt></i> bei längerer oder wiederholter Exposition <i><Expositionsweg angeben, wenn schlüssig belegt ist, dass diese Gefahr bei keinem anderen Expositionsweg besteht></i> .
	ET	Võib kahjustada elundeid <i><või märkida kõik mõjutatud elundid, kui need on teada></i> pikaajalisel või korduval kokkupuutel <i><märkida kokkupuuteviisi, kui on veenvalt tõestatud, et muud kokkupuuteviisid ei ole ohtlikud></i> .
	EL	•••••••• >.
	EN	May cause damage to organs <i><or state all organs affected, if known></i> through prolonged or repeated exposure <i><state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard></i> .
	FR	Risque présumé d'effets graves pour les organes <i><ou indiquer tous les organes affectés, s'ils sont connus></i> à la suite d'expositions répétées ou d'une exposition prolongée <i><indiquer la voie d'exposition s'il est formellement prouvé qu'aucune autre voie d'exposition ne conduit au même danger></i> .
	GA	D'fhéadfadh sé damáiste a dhéanamh d'orgáin <i><nó tabhair na horgáin go léir a bhuailtear, más eol></i> trí nochtadh fada nó ilnochtadh <i><tabhair an bealach noхта má tá sé cruthaithe go cinntitheach nach bealach noхта ar bith eile is cúis leis an nguais></i> .
	IT	Può provocare danni agli organi <i><o indicare tutti gli organi interessati, se noti></i> in caso di esposizione prolungata o ripetuta <i><indicare la via di esposizione se è accertato che nessun'altra via di esposizione comporta il medesimo pericolo></i> .
	LV	Var izraisīt orgānu bojājumus <i><vai norādīt visus skartos orgānus, ja tie ir zināmi></i> ilgstošas vai atkārtotas iedarbības rezultātā <i><norādīt iedarbības ceļu, ja ir nepāprotami pierādīts, ka citi iedarbības ceļi nerada bīstamību></i> .

H373	Language	3.9 – Specific target organ toxicity – Repeated exposure, Hazard Category 2
	LT	Gali pakenkti organams <arba nurodyti visus veikiamus organus, jeigu žinomi>, jeigu medžiaga veikia ilgai arba kartotinai <nurodyti veikimo b•d•, jeigu •tikinamai nustatyta, kad kiti veikimo b•dai nepavojingi>.
	HU	Ismétl•d• vagy hosszabb expozíció esetén < meg kell adni az expozíciós útvonalat, ha meggy•z•en bizonyított, hogy más expozíciós útvonal nem okozza a veszélyt > károsíthatja a szerveket > vagy meg kell adni az összes érintett szervet, ha ismertek >.
	MT	Jista' jikkaw•a •sara lill-organi <jew semmi l-organi kollha affettwati, jekk ikunu mag•rufa> min•abba espo•izzjoni fit-tul jew ripetuta <semmi l-mod ta' espo•izzjoni jekk ikun pruvat b'mod konklu•iv li l-ebda mod ta' espo•izzjoni ie•or ma jikkaw•a l-periklu>.
	NL	Kan schade aan organen <of alle betrokken organen vermelden indien bekend> veroorzaken bij langdurige of herhaalde blootstelling <blootstellingsroute vermelden indien afdoende bewezen is dat het gevaar bij andere blootstellingsroutes niet aanwezig is>.
	PL	Mo•e powodowa• uszkodzenie narz•dów <poda• wszystkie znane narz•dy, których to dotyczy > poprzez d•ugotrwa•e lub nara•enie powtarzane <poda• drog• nara•enia, je•li udowodniono, •e inne drogi nara•enia nie stwarzaj• zagro•enia>.
	PT	Pode afectar os órgãos <ou indicar todos os órgãos afectados, se forem conhecidos> após exposição prolongada ou repetida <indicar a via de exposição se existirem provas concludentes de que o perigo não decorre de nenhuma outra via de exposição>.
	RO	Poate provoca leziuni ale organelor <sau indica•i toate organele afectate, dac• sunt cunoscute> în caz de expunere prelungit• sau repetat• <indica•i calea de expunere, dac• exist• probe concludente c• nicio alt• cale de expunere nu provoac• acest pericol>.

H373	Language	3.9 – Specific target organ toxicity – Repeated exposure, Hazard Category 2
	SK	Môže spôsobiť poškodenie orgánov <alebo uveďte všetky zasiahnuté orgány, ak sú známe> pri dlhšej alebo opakovanej expozícii <uveďte spôsob expozície, ak sa presvedčívo preukáže, že iné spôsoby expozície nevyvolávajú nebezpečenstvo>.
	SL	Lahko škoduje organom <ali navesti vse organe, na katere vpliva, če je znano> pri dolgotrajni ali ponavljajoči se izpostavljenosti <navesti na in izpostavljenosti, če je prepričljivo dokazano, da noben drug način izpostavljenosti ne povzroča takšne nevarnosti>.
	FI	Saattaa vahingoittaa elimiä <tai mainitaan kaikki tiedetyt kohde-elimet> pitkäaikaisessa tai toistuvassa altistumisessa <mainitaan altistumisreitti, jos on kiistatta osoitettu, että vaara ei voi aiheutua muiden altistumisreittien kautta>.
	SV	Kan orsaka organskador <eller ange vilka organ som påverkas om detta är känt> genom lång eller upprepad exponering <ange exponeringsväg om det är definitivt bevisat att faran inte kan orsakas av några andra exponeringsvägar>.

H300 + H310	Language	3.1 – Acute toxicity (oral) and acute toxicity (dermal), Hazard Category 1, 2
	BG	
	ES	Mortal en caso de ingestión o en contacto con la piel
	CS	Při požití nebo při styku s kůží může způsobit smrt
	DA	Livsfarlig ved indtagelse eller hudkontakt
	DE	Lebensgefahr bei Verschlucken oder Hautkontakt
	ET	Allaneelamisel või nahale sattumisel surmav
	EL	
	EN	Fatal if swallowed or in contact with skin

H300 + H310	Language	3.1 – Acute toxicity (oral) and acute toxicity (dermal), Hazard Category 1, 2
	FR	Mortel par ingestion ou par contact cutané
	GA	Ábhar marfach é seo má shlogtar é nó má theagmhaíonn leis an gcráiceann
	IT	Mortale in caso di ingestione o a contatto con la pelle
	LV	Var izraisīt n•vi, ja nor•ts vai saskaras ar •du
	LT	Mirtina prarijus arba susilietus su oda
	HU	Lenyelve vagy b•rrel érintkezve halálos
	MT	Fatali jekk tinbela' jew tmiss mal-•ilda
	NL	Dodelijk bij inslikken en bij contact met de huid
	PL	Grozi •mierci• po po•kni•ciu lub w kontakcie ze skór•
	PT	Mortal por ingestão ou contacto com a pele
	RO	Mortal în caz de înghi•ire sau în contact cu pielea
	SK	Pri požití alebo styku s kožou môže spôsobi• smr•
	SL	Smrtno pri zaužitju ali v stiku s kožo
	FI	Tappavaa nieltynä tai joutuessaan iholle
	SV	Dödligt vid förtäring eller vid hudkontakt

H300 + H330	Language	3.1 – Acute toxicity (oral) and acute toxicity (inhalation), Hazard Category 1, 2
	BG	
	ES	Mortal en caso de ingestión o inhalación
	CS	P•i požití nebo p•i vdechování m•že zp•sobit smrt
	DA	Livsfarlig ved indtagelse eller indånding

H300 + H330	Language	3.1 – Acute toxicity (oral) and acute toxicity (inhalation), Hazard Category 1, 2
	DE	Lebensgefahr bei Verschlucken oder Einatmen
	ET	Allaneelamisel või sissehingamisel surmav
	EL	
	EN	Fatal if swallowed or if inhaled
	FR	Mortel par ingestion ou par inhalation
	GA	Ábhar marfach é seo má shlogtar nó má ionanálaítear é
	IT	Mortale se ingerito o inalato
	LV	Var izraisīt nāvi, ja norīts vai iekļūst elpceļos
	LT	Mirtina prarijus arba kvėpus
	HU	Lenyelve vagy belélegezve halálos
	MT	Fatali jekk tinbela' jew tittie'd bin-nifs
	NL	Dodelijk bij inslikken en bij inademing
	PL	Grozi śmierci po połknięciu lub w następstwie wdychania
	PT	Mortal por ingestão ou inalação
	RO	Mortal în caz de înghițire sau inhalare
	SK	Pri požití alebo vdýchnutí môže spôsobiť smrť
	SL	Smrtno pri zaužitju ali vdihavanju
	FI	Tappavaa nieltynä tai hengitettynä
	SV	Dödligt vid förtäring eller inandning

H310 + H330	Language	3.1 – Acute toxicity (dermal) and acute toxicity (inhalation), Hazard Category 1, 2
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H310 + H330	Language	3.1 – Acute toxicity (dermal) and acute toxicity (inhalation), Hazard Category 1, 2
	BG	
	ES	Mortal en contacto con la piel o si se inhala
	CS	Při styku s kůží nebo při vdechování může způsobit smrt
	DA	Livsfarlig ved hudkontakt eller indånding
	DE	Lebensgefahr bei Hautkontakt oder Einatmen
	ET	Nahale sattumisel või sissehingamisel surmav
	EL	
	EN	Fatal in contact with skin or if inhaled
	FR	Mortel par contact cutané ou par inhalation
	GA	Ábhar marfach é seo má theagmhaíonn leis an gcaiceann nó má ionanálaítear é
	IT	Mortale a contatto con la pelle o in caso di inalazione
	LV	Var izraisīt nāvi, ja saskaras ar todu vai nonāk elpošos
	LT	Mirtina susilietus su oda arba kvėpus
	HU	Bőrrel érintkezve vagy belélegezve halálos
	MT	Fatali f'kuntatt mal-ildja jew jekk tittie'ed bin-nifs
	NL	Dodelijk bij contact met de huid en bij inademing
	PL	Grozi śmierci w kontakcie ze skórą lub w następstwie wdychania
	PT	Mortal por contacto com a pele ou inalação
	RO	Mortal în contact cu pielea sau prin inhalare
	SK	Pri styku s kožou alebo pri vdýchnutí môže spôsobiť smrť
	SL	Smrtno v stiku s kožo ali pri vdihavanju
	FI	Tappavaa joutuessaan iholle tai hengitettynä

H310 + H330	Language	3.1 – Acute toxicity (dermal) and acute toxicity (inhalation), Hazard Category 1, 2
	SV	Dödligt vid hudkontakt eller inandning

H300 + H310 + H330	Language	3.1 – Acute toxicity (oral), acute toxicity (dermal) and acute toxicity (inhalation), Hazard Category 1, 2
	BG	
	ES	Mortal en caso de ingestión, contacto con la piel o inhalación
	CS	P•i požití, p•i styku s k•ží nebo p•i vdechování m•že zp•sobit smrt
	DA	Livsfarlig ved indtagelse, hudkontakt eller indånding
	DE	Lebensgefahr bei Verschlucken, Hautkontakt oder Einatmen
	ET	Allaneelamisel, nahale sattumisel või sissehingamisel surmav
	EL	••

H300 + H310 + H330	Language	3.1 – Acute toxicity (oral), acute toxicity (dermal) and acute toxicity (inhalation), Hazard Category 1, 2
	PT	Mortal por ingestão, contacto com a pele ou inalação
	RO	Mortal în caz de înghițire, în contact cu pielea sau prin inhalare
	SK	Pri požití, pri styku s kožou alebo pri vdýchnutí môže spôsobiť smrť
	SL	Smrtno pri zaužitju, v stiku s kožo ali pri vdihavanju
	FI	Tappavaa nieltynä, joutuessaan iholle tai hengitettynä
	SV	Dödligt vid förtäring, hudkontakt eller inandning

H301 + H311	Language	3.1 – Acute toxicity (oral) and acute toxicity (dermal), Hazard Category 3
	BG	
	ES	Tóxico en caso de ingestión o en contacto con la piel
	CS	Toxický při požití a při styku s kůží
	DA	Giftig ved indtagelse eller hudkontakt
	DE	Giftig bei Verschlucken oder Hautkontakt
	ET	Allaneelamisel või nahale sattumisel mürgine
	EL	
	EN	Toxic if swallowed or in contact with skin
	FR	Toxique par ingestion ou par contact cutané
	GA	Ábhar tocsaineach má shlogtar é nó má theagmhaíonn leis an gcaiceann
	IT	Tossico se ingerito o a contatto con la pelle
	LV	Toksisks, ja norīts vai saskaras ar ādu
	LT	Toksiška prarijus arba susilietus su oda

H301 + H311	Language	3.1 – Acute toxicity (oral) and acute toxicity (dermal), Hazard Category 3
	HU	Lenyelve vagy bőrrel érintkezve mérgező
	MT	Tossika jekk tinbela' jew tmiss mal-ildida
	NL	Giftig bij inslikken en bij contact met de huid
	PL	Działa toksycznie po połknięciu lub w kontakcie ze skórą
	PT	Tóxico por ingestão ou contacto com a pele
	RO	Toxic în caz de înghițire sau în contact cu pielea
	SK	Toxický pri požití a pri styku s kožou
	SL	Strupeno pri zaužitju ali v stiku s kožo
	FI	Myrkyllistä nieltynä tai joutuessaan iholle
	SV	Giftigt vid förtäring eller hudkontakt

H301 + H331	Language	3.1 – Acute toxicity (oral) and acute toxicity (inhalation), Hazard Category 3
	BG	
	ES	Tóxico en caso de ingestión o inhalación
	CS	Toxický při požití a při vdechování
	DA	Giftig ved indtagelse eller indånding
	DE	Giftig bei Verschlucken oder Einatmen
	ET	Allaneelamisel või sissehingamisel mürgine
	EL	
	EN	Toxic if swallowed or if inhaled
	FR	Toxique par ingestion ou par inhalation

H301 + H331	Language	3.1 – Acute toxicity (oral) and acute toxicity (inhalation), Hazard Category 3
	GA	Ábhar tocsaineach má shlogtar nó má ionanálaítear é
	IT	Tossico se ingerito o inalato
	LV	Toksisks, ja nor•ts vai iek••st elpce•os
	LT	Toksiška prarijus arba •kv•pus
	HU	Lenyelve vagy belélegezve mérgez•
	MT	Tossika jekk tinbela' jew tittie•ed bin-nifs
	NL	Giftig bij inslikken en bij inademing
	PL	Dzia•a toksycznie po po•kni•ciu lub w nast•pstwie wdychania
	PT	Tóxico por ingestão ou inalação
	RO	Toxic în caz de înghi•ire sau prin inhalare
	SK	Toxický pri požití alebo vdýchnutí
	SL	Strupeno pri zaužitju ali vdihavanju
	FI	Myrkyllistä nieltynä tai hengitettynä
	SV	Giftigt vid förtäring eller inandning

H311 + H331	Language	3.1 – Acute toxicity (dermal) and acute toxicity (inhalation), Hazard Category 3
	BG	
	ES	Tóxico en contacto con la piel o si se inhala
	CS	Toxický p•i styku s k•ží a p•i vdechování
	DA	Livsfarlig ved hudkontakt eller indånding
	DE	Giftig bei Hautkontakt oder Einatmen

H311 + H331	Language	3.1 – Acute toxicity (dermal) and acute toxicity (inhalation), Hazard Category 3
	ET	Nahale sattumisel või sissehingamisel mürgine
	EL	
	EN	Toxic in contact with skin or if inhaled
	FR	Toxique par contact cutané ou par inhalation
	GA	Ábhar tocsaineach má theagmhaíonn leis an ggraicean nó má ionanálaítear é
	IT	Tossico a contatto con la pelle o se inalato
	LV	Toksisks saskar • ar • du vai ja iek ••st elpce•os
	LT	Toksiška susilietus su oda arba •kv•pus
	HU	B•rrel érintkezve vagy belélegezve mérgez•
	MT	Tossika jekk tmiss mal-•ilda jew tittie•eb bin-nifs
	NL	Giftig bij contact met de huid en bij inademing
	PL	Dzia•a toksycznie w kontakcie ze skór• lub w nast•pstwie wdychania
	PT	Tóxico em contacto com a pele ou por inalação
	RO	Toxic în contact cu pielea sau prin inhalare
	SK	Toxický pri styku s kožou alebo pri vdýchnutí
	SL	Strupeno v stiku s kožo ali pri vdihavanju
	FI	Myrkyllistä joutuessaan iholle tai hengitettynä
	SV	Giftigt vid hudkontakt eller förtäring

H301 + H311 + H331	Language	3.1 – Acute toxicity (oral), acute toxicity (dermal) and acute toxicity (inhalation), Hazard Category 3
	BG	

H301 + H311 + H331	Language	3.1 – Acute toxicity (oral), acute toxicity (dermal) and acute toxicity (inhalation), Hazard Category 3
	ES	Tóxico en caso de ingestión, contacto con la piel o inhalación
	CS	Toxický p•i požití, p•i styku s k•ží a p•i vdechování
	DA	Giftig ved indtagelse, hudkontakt eller indånding
	DE	Giftig bei Verschlucken, Hautkontakt oder Einatmen
	ET	Allaneelamisel, nahale sattumisel või sissehingamisel mürgine
	EL	••

H301 + H311 + H331	Language	3.1 – Acute toxicity (oral), acute toxicity (dermal) and acute toxicity (inhalation), Hazard Category 3
	SV	Giftigt vid förtäring, hudkontakt eller inandning

H302 + H312	Language	3.1 – Acute toxicity (oral) and acute toxicity (dermal), Hazard Category 4
	BG	
	ES	Nocivo en caso de ingestión o en contacto con la piel
	CS	Zdraví škodlivý p•i požití a p•i styku s k•ží
	DA	Livsfarlig ved indtagelse eller hudkontakt
	DE	Gesundheitsschädlich bei Verschlucken oder Hautkontakt
	ET	Allaneelamisel või nahale sattumisel kahjulik
	EL	
	EN	Harmful if swallowed or in contact with skin
	FR	Nocif en cas d'ingestion ou de contact cutané
	GA	Ábhar dochrach má shlogtar é nó má theagmhaíonn leis an gcaiceann
	IT	Nocivo se ingerito o a contatto con la pelle
	LV	Kait•gs, ja nor•ts vai saskaras ar •du
	LT	Kenksminga prarijus arba susilietus su oda
	HU	Lenyelve vagy b•rrel érintkezve ártalmas
	MT	Tag•mel •sara jekk tinbela' jew jekk tmiss mal-•ilda
	NL	Schadelijk bij inslikken en bij contact met de huid
	PL	Dzia•a szkodliwie po po•kni•ciu lub w kontakcie ze skór•
	PT	Nocivo por ingestão ou contacto com a pele

H302 + H312	Language	3.1 – Acute toxicity (oral) and acute toxicity (dermal), Hazard Category 4
	RO	Nociv în caz de înghițire sau în contact cu pielea
	SK	Zdraviu škodlivý pri požití alebo pri styku s kožou
	SL	Zdravju škodljivo pri zaužitju ali v stiku s kožo
	FI	Haitallista nieltynä tai joutuessaan iholle
	SV	Skadligt vid förtäring eller hudkontakt

H302 + H332	Language	3.1 – Acute toxicity (oral) and acute toxicity (inhalation), Hazard Category 4
	BG	
	ES	Nocivo en caso de ingestión o inhalación
	CS	Zdraví škodlivý p•i požití a p•i vdechování
	DA	Farlig ved indtagelse eller indånding
	DE	Gesundheitsschädlich bei Verschlucken oder Einatmen
	ET	Allaneelamisel või sissehingamisel kahjulik
	EL	
	EN	Harmful if swallowed or if inhaled
	FR	Nocif en cas d'ingestion ou d'inhalation
	GA	Ábhar dochrach má shlogtar nó má ionanálaítear é
	IT	Nocivo se ingerito o inalato
	LV	Kait•gs, ja nor•ts vai iek••st elpce•os
	LT	Kenksminga prarijus arba •kv•pus
	HU	Lenyelve vagy belélegezve ártalmas

H302 + H332	Language	3.1 – Acute toxicity (oral) and acute toxicity (inhalation), Hazard Category 4
	MT	Tag•mel •sara jekk tinbela' jew tittie•ed bin-nifs
	NL	Schadelijk bij inslikken en bij inademing
	PL	Dzia•a szkodliwe po po•kni•ciu lub w nast•pstwie wdychania
	PT	Nocivo por ingestão ou inalação
	RO	Nociv în caz de înghi•ire sau inhalare
	SK	Zdraviu škodlivý pri požití alebo vdýchnutí
	SL	Zdravju škodljivo pri zaužitju in vdihavanju
	FI	Haitallista nieltynä tai hengitetynä
	SV	Skadligt vid förtäring eller inandning

H312 + H332	Language	3.1 – Acute toxicity (dermal) and acute toxicity (inhalation), Hazard Category 4
	BG	
	ES	Nocivo en contacto con la piel o si se inhala
	CS	Zdraví škodlivý p•i styku s k•ží a p•i vdechování
	DA	Farlig ved hudkontakt eller indånding
	DE	Gesundheitsschädlich bei Hautkontakt oder Einatmen
	ET	Nahale sattumisel või sissehingamisel kahjulik
	EL	
	EN	Harmful in contact with skin or if inhaled
	FR	Nocif en cas de contact cutané ou d'inhalation
	GA	Ábhar dochrach má theagmhaíonn leis an ggráiceann nó má ionanálaítear é

H312 + H332	Language	3.1 – Acute toxicity (dermal) and acute toxicity (inhalation), Hazard Category 4
	IT	Nocivo a contatto con la pelle o se inalato
	LV	Kaitīgs saskars ar ādu vai ja iekšstelpceļos
	LT	Kenksminga susilietus su oda arba kvėpus
	HU	Bőrrrel érintkezve vagy belélegezve ártalmas
	MT	Tagħmel sara jekk tmiss mal-ilda jew jekk tittieed bin-nifs
	NL	Schadelijk bij contact met de huid en bij inademing
	PL	Działa szkodliwie w kontakcie ze skórą lub w następstwie wdychania
	PT	Nocivo em contacto com a pele ou por inalação
	RO	Nociv în contact cu pielea sau prin inhalare
	SK	Zdraviu škodlivý pri styku s kožou alebo pri vdýchnutí
	SL	Zdravju škodljivo v stiku s kožo in pri vdihavanju
	FI	Haitallista joutuessaan iholle tai hengitettynä
	SV	Skadligt vid hudkontakt eller inandning

H302 + H312 + H332	Language	3.1 – Acute toxicity (oral), acute toxicity (dermal) and acute toxicity (inhalation), Hazard Category 4
	BG	
	ES	Nocivo en caso de ingestión, contacto con la piel o inhalación
	CS	Zdraví škodlivý při požití, při styku s kůží a při vdechování
	DA	Farlig ved indånding, hudkontakt eller indånding
	DE	Gesundheitsschädlich bei Verschlucken, Hautkontakt oder Einatmen
	ET	Allaneelamisel, nahale sattumisel või sissehingamisel kahjulik

H302 + H312 + H332	Language	3.1 – Acute toxicity (oral), acute toxicity (dermal) and acute toxicity (inhalation), Hazard Category 4
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Table 1.3**Hazard statements for environmental hazards**

H400	Language	4.1 – Hazardous to the aquatic environment – AcuteHazard, Category 1
	BG	
	ES	Muy tóxico para los organismos acuáticos.
	CS	Vysoce toxický pro vodní organismy.
	DA	Meget giftig for vandlevende organismer.
	DE	Sehr giftig für Wasserorganismen.
	ET	Väga mürgine veeorganismidele.
	EL	
	EN	Very toxic to aquatic life.
	FR	Très toxique pour les organismes aquatiques.
	GA	An-tocsaineach don saol uisceach.
	IT	Molto tossico per gli organismi acquatici.
	LV	•oti toksisks •dens organismiem.
	LT	Labai toksiška vandens organizmams.
	HU	Nagyon mérgező • a vízi él•világra.
	MT	Tossiku •afna g•all-organi•mi akwati•i.
	NL	Zeer giftig voor in het water levende organismen.
	PL	Dzia•a bardzo toksycznie na organizmy wodne.
	PT	Muito tóxico para os organismos aquáticos.
	RO	Foarte toxic pentru mediul acvatic.

H400	Language	4.1 – Hazardous to the aquatic environment – Acute Hazard, Category 1
	SK	Veľmi toxický pre vodné organizmy.
	SL	Zelo strupeno za vodne organizme.
	FI	Erittäin myrkyllistä vesieläimille.
	SV	Mycket giftigt för vattenlevande organismer.

H410	Language	4.1 – Hazardous to the aquatic environment – Chronic Hazard, Category 1
	BG	
	ES	Muy tóxico para los organismos acuáticos, con efectos nocivos duraderos.
	CS	Vysoce toxický pro vodní organismy, s dlouhodobými účinky.
	DA	Meget giftig med langvarige virkninger for vandlevende organismer.
	DE	Sehr giftig für Wasserorganismen mit langfristiger Wirkung.
	ET	Väga mürgine veeorganismidele, pikaajaline toime.
	EL	
	EN	Very toxic to aquatic life with long lasting effects.
	FR	Très toxique pour les organismes aquatiques, entraîne des effets néfastes à long terme.
	GA	An-tocsaineach don saol uisceach, le héifeachtaí fadtréimhseacha.
	IT	Molto tossico per gli organismi acquatici con effetti di lunga durata.
	LV	•oti toksisks •dens organismiem ar ilgstoš•m sek•m.

H410	Language	4.1 – Hazardous to the aquatic environment – Chronic Hazard, Category 1
	LT	Labai toksiška vandens organizmams, sukelia ilgalaikius pakitimus.
	HU	Nagyon mérgező a vízi élővilágra, hosszan tartó károsodást okoz.
	MT	Tossiku għall-organismi akwatici b'mod li jgħalli effetti dejjiema.
	NL	Zeer giftig voor in het water levende organismen, met langdurige gevolgen.
	PL	Działa bardzo toksycznie na organizmy wodne, powodując długotrwałe skutki.
	PT	Muito tóxico para os organismos aquáticos com efeitos duradouros.
	RO	Foarte toxic pentru mediul acvatic cu efecte pe termen lung.
	SK	Veľmi toxický pre vodné organizmy, s dlhodobými účinkami.
	SL	Zelo strupeno za vodne organizme, z dolgotrajnimi učinki.
	FI	Erittäin myrkyllistä vesieläölle, pitkäaikaisia haittavaikutuksia.
	SV	Mycket giftigt för vattenlevande organismer med långtidseffekter.

H411	Language	4.1 – Hazardous to the aquatic environment - Chronic Hazard, Category 2
	BG	
	ES	Tóxico para los organismos acuáticos, con efectos nocivos duraderos.
	CS	Toxický pro vodní organismy, s dlouhodobými účinky.
	DA	Giftig for vandlevende organismer, med langvarige virkninger.

H411	Language	4.1 – Hazardous to the aquatic environment - Chronic Hazard, Category 2
	DE	Giftig für Wasserorganismen, mit langfristiger Wirkung..
	ET	Mürgine veeorganismidele, pikaajaline toime.
	EL	•
	EN	Toxic to aquatic life with long lasting effects.
	FR	Toxique pour les organismes aquatiques, entraîne des effets néfastes à long terme.
	GA	Tocsaineach don saol uisceach, le héifeachtaí fadtréimhseacha.
	IT	Tossico per gli organismi acquatici con effetti di lunga durata.
	LV	Toksisks •dens organismiem ar ilgstoš•m sek•m.
	LT	Toksiška vandens organizmams, sukelia ilgalaikius pakitimus.
	HU	Mérgez• a vízi él•világra, hosszan tartó károsodást okoz.
	MT	Tossiku g•all-organi•mi akwati•i b'•mod li j•alli effetti dejjiema.
	NL	Giftig voor in het water levende organismen, met langdurige gevolgen.
	PL	Dzia•a toksycznie na organizmy wodne, powoduj•c d•ugotrwa•e skutki.
	PT	Tóxico para os organismos aquáticos com efeitos duradouros.
	RO	Toxic pentru mediul acvatic cu efecte pe termen lung.
	SK	Toxický pre vodné organizmy, s dlhodobými ú•inkami.
	SL	Strupeno za vodne organizme, z dolgotrajnimi u•inki.
	FI	Myrkyllistä vesieliöille, pitkäaikaisia haittavaikutuksia.
	SV	Giftigt för vattenlevande organismer med långtidseffekter.

H412	Language	4.1 – Hazardous to the aquatic environment – Chronic Hazard, Category 3
	BG	
	ES	Nocivo para los organismos acuáticos, con efectos nocivos duraderos.
	CS	Škodlivý pro vodní organismy, s dlouhodobými účinky.
	DA	Skadelig for vandlevende organismer, med langvarige virkninger.
	DE	Schädlich für Wasserorganismen, mit langfristiger Wirkung.
	ET	Ohtlik veeorganismidele, pikaajaline toime.
	EL	.
	EN	Harmful to aquatic life with long lasting effects.
	FR	Nocif pour les organismes aquatiques, entraîne des effets néfastes à long terme.
	GA	Díobhálach don saol uisceach, le héifeachtaí fadtréimhseacha.
	IT	Nocivo per gli organismi acquatici con effetti di lunga durata.
	LV	Kaitīgs ūdens organismiem ar ilgstošām sekām.
	LT	Kenksminga vandens organizmams, sukelia ilgalaikius pakitimus.
	HU	Ártalmas a vízi élővilágra, hosszan tartó károsodást okoz.
	MT	Jagħmel sara lill-organiżmi akwati b' mod li jalli effetti dejjiema.
	NL	Schadelijk voor in het water levende organismen, met langdurige gevolgen.

H412	Language	4.1 – Hazardous to the aquatic environment – Chronic Hazard, Category 3
	PL	Działa szkodliwie na organizmy wodne, powodując długotrwałe skutki.
	PT	Nocivo para os organismos aquáticos com efeitos duradouros.
	RO	Nociv pentru mediul acvatic cu efecte pe termen lung.
	SK	Škodlivý pre vodné organizmy, s dlhodobými účinkami.
	SL	Škodljivo za vodne organizme, z dolgotrajnimi učinki.
	FI	Haitallista vesieliölle, pitkäaikaisia haittavaikutuksia.
	SV	Skadliga långtidseffekter för vattenlevande organismer.

H413	Language	4.1 – Hazardous to the aquatic environment – Chronic Hazard, Category 4
	BG	
	ES	Puede ser nocivo para los organismos acuáticos, con efectos nocivos duraderos.
	CS	Může vyvolat dlouhodobé škodlivé účinky pro vodní organismy.
	DA	Kan forårsage langvarige skadelige virkninger for vandlevende organismer.
	DE	Kann für Wasserorganismen schädlich sein, mit langfristiger Wirkung.
	ET	Võib avaldada veeorganismidele pikaajalist kahjulikku toimet.
	EL	
	EN	May cause long lasting harmful effects to aquatic life.

H413	Language	4.1 – Hazardous to the aquatic environment – Chronic Hazard, Category 4
	FR	Peut être nocif à long terme pour les organismes aquatiques.
	GA	D'fhéadfadh sé a bheith ina chúis le héifeachtaí fadtréimhseacha díobhálacha ar an saol uisceach.
	IT	Può essere nocivo per gli organismi acquatici con effetti di lunga durata.
	LV	Var radīt ilgstošas kaitīgās sekas ūdens organismiem.
	LT	Gali sukelti ilgalaikę kenksmingę poveikę vandens organizmams.
	HU	Hosszan tartó ártalmas hatást gyakorolhat a vízi élővilágra.
	MT	Jista' jikkawha effetti ta' sara dejjiema lill-organi mi akwati.
	NL	Kan langdurige schadelijke gevolgen voor in het water levende organismen hebben.
	PL	Może powodować długotrwałe szkodliwe skutki dla organizmów wodnych.
	PT	Pode provocar efeitos nocivos duradouros nos organismos aquáticos.
	RO	Poate provoca efecte nocive pe termen lung asupra mediului acvatic.
	SK	Môže mať dlhodobé škodlivé účinky na vodné organizmy.
	SL	Lahko ima dolgotrajne škodljive učinke na vodne organizme.
	FI	Voi aiheuttaa pitkäaikaisia haittavaikutuksia vesieläimille.
	SV	Kan ge skadliga långtidseffekter på vattenlevande organismer.

H420	Language	5.1– Hazardous to the ozone layer – Hazard Category 1
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H420	Language	5.1– Hazardous to the ozone layer – Hazard Category 1
	BG	
	ES	Causa daños a la salud pública y el medio ambiente al destruir el ozono en la atmósfera superior
	CS	Poškozuje veřejné zdraví a životní prostředí tím, že ničí ozon ve svrchních vrstvách atmosféry
	DA	Skader folkesundheden og miljøet ved at ødelægge ozon i den øvre atmosfære
	DE	Schädigt die öffentliche Gesundheit und die Umwelt durch Ozonabbau in der äußeren
	ET	Kahjustab rahvatervist ja keskkonda, hävitades kõrgatmosfääris asuvat osoonikihti
	EL	
	EN	Harms public health and the environment by destroying ozone in the upper atmosphere
	FR	Nuit à la santé publique et à l'environnement en détruisant l'ozone dans la haute atmosphère
	GA	Déanann an t-ábhar seo díobháil don tsláinte phoiblí agus don chomhshaol trí ózón san atmaisféar
	IT	Nuoce alla salute pubblica e all'ambiente distruggendo l'ozono dello strato superiore
	LV	Bstams sabiedrības veselībai un videi, jo iznīcina ozonu atmosfēras augšējā slānī
	LT	Kenkia visuomenės sveikatai ir aplinkai, nes naikina ozono sluoksnį viršutinėje atmosferoje
	HU	Károsítja a közegészséget és a környezetet, mert a légkör felső rétegeiben lebontja az ózont
	MT	Tagħmel sara li-saħħa tal-pubbliku u lill-ambjent billi teqred l-ożonu fl-atmosfera ta' fuq
	NL	Schadelijk voor de volksgezondheid en het milieu door afbraak van ozon in de bovenste lagen
	PL	Szkodliwe dla zdrowia publicznego i środowiska w związku z niszczeniem oddziaływaniem na
	PT	Prejudica a saúde pública e o ambiente ao destruir o ozono na alta atmosfera
	RO	Dunează sănătății publice și mediului înconjurător prin distrugerea ozonului în atmosfera
	SK	Poškodzuje verejné zdravie a životné prostredie tým, že ničí ozón vo vrchných vrstvách
	SL	Škodljivo za javno zdravje in okolje zaradi uničevanja ozona v zgornji atmosferi
	FI	Vahingoittaa kansanterveyttä ja ympäristöä tuhoamalla otsonia ylemmässä ilmakehässä
	SV	Skadar folkhälsan och miljön genom förstöring av ozonet i övre delen av atmosfären

2. PART 2: SUPPLEMENTAL HAZARD INFORMATION

Table 2.1
Physical properties

EUH 001	Language	
	BG	
	ES	Explosivo en estado seco.
	CS	Výbušný v suchém stavu.
	DA	Eksplisiv i tør tilstand.
	DE	In trockenem Zustand explosionsgefährlich.
	ET	Plahvatusohtlik kuivana.
	EL	
	EN	Explosive when dry.
	FR	Explosif à l'état sec.
	GA	Pléascach agus é tirim.
	IT	Esplosivo allo stato secco.
	LV	Spr•dzienb•stams saus• veid•.
	LT	Sausos b•senos gali sprogti.
	HU	Száraz állapotban robbanásveszélyes.
	MT	Jisplodi meta jinxef.
	NL	In droge toestand ontplofbaar.
	PL	Produkt wybuchowy w stanie suchym.
	PT	Explosivo no estado seco.

EUH 001	Language	
	RO	Exploziv în stare uscat•.
	SK	V suchom stave výbušný.
	SL	Eksplzivno v suhem stanju.
	FI	Räjätävää kuivana.
	SV	Explosivt i torrt tillstånd.

EUH 006	Language	
	BG	
	ES	Explosivo en contacto o sin contacto con el aire.
	CS	Výbušný za p•ístupu i bez p•ístupu vzduchu.
	DA	Eksplisiv ved og uden kontakt med luft.
	DE	Mit und ohne Luft explosionsfähig.
	ET	Plahvatusohtlik õhuga kokkupuutel või kokkupuuteta.
	EL	
	EN	Explosive with or without contact with air.
	FR	Danger d'explosion en contact ou sans contact avec l'air.
	GA	Pléascach i dteagmháil le haer nó gan é.
	IT	Esplosivo a contatto o senza contatto con l'aria.
	LV	Spr•dzienb•stams gaisa un bezgaisa vid•.
	LT	Gali sprogti ore arba beor•je erdv•je.

EUH 006	Language	
	HU	Leveg•vel érintkezve vagy anélkül is robbanásveszélyes.
	MT	Jista' jisplodi b'kuntatt jew bla kuntatt ma' l-ajra.
	NL	Ontplofbaar met en zonder lucht.
	PL	Produkt wybuchowy z dost•pem lub bez dost•pu powietrza.
	PT	Perigo de explosão com ou sem contacto com o ar.
	RO	Exploziv în contact sau f•r• contactul cu aerul.
	SK	Výbušné pri kontakte alebo bez kontaktu so vzduchom.
	SL	Eksplozivno v stiku z zrakom ali brez stika z zrakom.
	FI	Räjätävää sellaisenaan tai ilman kanssa.
	SV	Explosivt vid eller utan kontakt med luft.

EUH 014	Language	
	BG	
	ES	Reacciona violentamente con el agua.
	CS	Prudce reaguje s vodou.
	DA	Reagerer voldsomt med vand.
	DE	Reagiert heftig mit Wasser.
	ET	Reageerib ägedalt veega.
	EL	
	EN	Reacts violently with water.

EUH 014	Language	
	FR	Réagit violemment au contact de l'eau.
	GA	Imoibríonn go foirtíl le huisce.
	IT	Reagisce violentemente con l'acqua.
	LV	Akt•vi rea•• ar •deni.
	LT	Smarkiai reaguoja su vandeniu.
	HU	Vízzel hevesen reagál.
	MT	Jirrea•ixxi bil-qawwa meta jmiss l-ilma.
	NL	Reageert heftig met water.
	PL	Reaguje gwałtownie z wodą.
	PT	Reage violentamente em contacto com a água.
	RO	Reac•ioneaz• violent în contact cu apa.
	SK	Prudko reaguje s vodou.
	SL	Burno reagira z vodo.
	FI	Reagoi voimakkaasti veden kanssa.
	SV	Reagerar häftigt med vatten.

EUH 018	Language	
	BG	
	ES	Al usarlo pueden formarse mezclas aire-vapor explosivas o inflamables.

EUH 018	Language	
	CS	Při používání může vytvářet hořlavé nebo výbušné směsi par se vzduchem.
	DA	Ved brug kan brandbarlige dampe/eksplosive damp-luftblandinger dannes.
	DE	Kann bei Verwendung explosionsfähige/entzündbare Dampf/Luft-Gemische bilden.
	ET	Kasutamisel võib moodustuda tule-/plahvatusohtlik auru-õhu segu.
	EL	-.....,
	EN	In use may form flammable/explosive vapour-air mixture.
	FR	Lors de l'utilisation, formation possible de mélange vapeur-air inflammable/explosif.
	GA	Agus é á úsáid d'fhéadfaí meascán inadhaite/pléascach gaile-aeir a chruthú.
	IT	Durante l'uso può formarsi una miscela vapore-aria esplosiva/infiammabile.
	LV	Izmantojot var veidot uzliesmojošu vai sprādzienbīstamu tvaiku un gaisa maisījumu.
	LT	Naudojama gali sudaryti degius (sprogus) garų-oro mišinius.
	HU	A használat során tűveszélyes/robbanásveszélyes gőz/levegőelegy keletkezhet.
	MT	Meta jintuwa jista' jiffirma ta' litiet esplussivi jew li jaqbdu jekk jitallat ma' l-arja.
	NL	Kan bij gebruik een ontvlambaar/ontplofbaar damp-luchtmengsel vormen.
	PL	Podczas stosowania mogą powstać łatwopalne lub wybuchowe mieszaniny par z powietrzem.

EUH 018	Language	
	PT	Pode formar mistura vapor-ar explosiva/inflamável durante a utilização.
	RO	În timpul utilizării poate forma un amestec vapori-aer, inflamabil/exploziv.
	SK	Pri použití môže vytvárať horľavú/výbušnú zmes pâr so vzduchom.
	SL	Pri uporabi lahko tvori vnetljivo/eksplozivno zmes hlapi-zrak.
	FI	Käytössä voi muodostua syttyvä/räjätävä höyry-ilmaseos.
	SV	Vid användning kan brännbara/explosiva ång-luftblandningar bildas.

EUH 019	Language	
	BG	
	ES	Puede formar peróxidos explosivos.
	CS	Může vytvářet výbušné peroxidy.
	DA	Kan danne eksplosive peroxider.
	DE	Kann explosionsfähige Peroxide bilden.
	ET	Võib moodustada plahvatusohtlikke peroksiide.
	EL	
	EN	May form explosive peroxides.
	FR	Peut former des peroxydes explosifs.
	GA	D'fhéadfadh sé sárocsaídí pléascacha a chruthú.

EUH 019	Language	
	IT	Può formare perossidi esplosivi.
	LV	Var veidot spr•dzienb•stamus peroks•dus.
	LT	Gali sudaryti sprogius peroksidus.
	HU	Robbanásveszélyes peroxidokat képezhet.
	MT	Jista' jiforma perossidi esplussivi.
	NL	Kan ontplofbare peroxiden vormen.
	PL	Mo•e tworzy• wybuchowe nadtlenki.
	PT	Pode formar peróxidos explosivos.
	RO	Poate forma peroxizi explozivi.
	SK	Môže vytvárať výbušné peroxidy.
	SL	Lahko tvori eksplozivne perokside.
	FI	Saattaa muodostaa räjähtäviä peroksideja.
	SV	Kan bilda explosiva peroxider.

EUH 044	Language	
	BG	
	ES	Riesgo de explosión al calentarlo en ambiente confinado.
	CS	Nebezpečí výbuchu při zahřátí v uzavřeném obalu.
	DA	Eksplodingsfarlig ved opvarmning under indeslutning.
	DE	Explosionsgefahr bei Erhitzen unter Einschluss.

EUH 044	Language	
	ET	Plahvatusohtlik kuumutamisel kinnises mahutis.
	EL	
	EN	Risk of explosion if heated under confinement.
	FR	Risque d'explosion si chauffé en ambiance confinée.
	GA	Baol pléasctha arna théamh i limistéar iata.
	IT	Rischio di esplosione per riscaldamento in ambiente confinato.
	LV	Spr•dziena draudi, kars•jot sl•gt• vid•.
	LT	Gali sprogti, jei kaitinama sandariai uždaryta.
	HU	Zárt térben h• hatására robbanhat.
	MT	Riskju ta' splu•joni jekk jissa••an fil-mag•luq.
	NL	Ontploffingsgevaar bij verwarming in afgesloten toestand.
	PL	Zagro•enie wybuchem po ogrzaniu w zamkni•tym pojemniku.
	PT	Risco de explosão se aquecido em ambiente fechado.
	RO	Risc de explozie, dac• este înc•lzit în spa•iu închis.
	SK	Riziko výbuchu pri zahrievaní v uzavretom priestore.
	SL	Nevarnost eksplozije ob segrevanju v zaprtem prostoru.
	FI	Räjähdyksvaara kuumennettaessa suljetussa astiassa.
	SV	Explosionsrisk vid uppvärmning i sluten behållare.

Table 2.2
Health properties

EUH 029	Language	
	BG	
	ES	En contacto con agua libera gases tóxicos.
	CS	Uvol•uje toxický plyn p•i styku s vodou.
	DA	Udvikler giftig gas ved kontakt med vand.
	DE	Entwickelt bei Berührung mit Wasser giftige Gase.
	ET	Kokkupuutel veega eraldub mürgine gaas.
	EL	
	EN	Contact with water liberates toxic gas.
	FR	Au contact de l'eau, dégage des gaz toxiques.
	GA	I dteagmháil le huisce scaoiltear gás tocsaineach.
	IT	A contatto con l'acqua libera un gas tossico.
	LV	Saskaroties ar •deni, izdala toksiskas g•zes.
	LT	Kontaktuodama su vandeniu išskiria toksiškas dujas.
	HU	Vízzel érintkezve mérgező• gázok képz•dnek.
	MT	Jitfa' gass tossiku meta jmiss l-ilma.
	NL	Vormt giftig gas in contact met water.
	PL	W kontakcie z wod• uwalnia toksyczne gazy.
	PT	Em contacto com a água liberta gases tóxicos.
	RO	În contact cu apa, degaj• un gaz toxic.

EUH 029	Language	
	SK	Pri kontakte s vodou uvo••uje toxický plyn.
	SL	V stiku z vodo se sproš•a strupen plin.
	FI	Kehittää myrkyllistä kaasua veden kanssa.
	SV	Utvecklar giftig gas vid kontakt med vatten.

EUH 031	Language	
	BG	••
	ES	En contacto con ácidos libera gases tóxicos.
	CS	Uvol•uje toxický plyn p•i styku s kyselinami.
	DA	Udvikler giftig gas ved kontakt med syre.
	DE	Entwickelt bei Berührung mit Säure giftige Gase.
	ET	Kokkupuutel hapetega eraldub mürgine gaas.
	EL	
	EN	Contact with acids liberates toxic gas.
	FR	Au contact d'un acide, dégage un gaz toxique.
	GA	I dteagmháil le haigéid scaoiltear gás tocsaineach.
	IT	A contatto con acidi libera gas tossici.
	LV	Saskaroties ar sk•b•m, izdala toksiskas g•zes.
	LT	Kontaktuodama su r•gštimis išskiria toksiškas dujas.
	HU	Savval érintkezve mérgez• gázok képz•dnek.

EUH 031	Language	
	MT	Jitfa' gass tossiku meta jmiss l-a•idi.
	NL	Vormt giftig gas in contact met zuren.
	PL	W kontakcie z kwasami uwalnia toksyczne gazy.
	PT	Em contacto com ácidos liberta gases tóxicos.
	RO	În contact cu acizi, degaj• un gaz toxic.
	SK	Pri kontakte s kyselinami uvo••uje toxický plyn.
	SL	V stiku s kislinami se sproš•a strupen plin.
	FI	Kehittää myrkyllistä kaasua hapon kanssa.
	SV	Utvecklar giftig gas vid kontakt med syra.

EUH 032	Language	
	BG	
	ES	En contacto con ácidos libera gases muy tóxicos.
	CS	Uvol•uje vysoce toxický plyn p•i styku s kyselinami.
	DA	Udvikler meget giftig gas ved kontakt med syre.
	DE	Entwickelt bei Berührung mit Säure sehr giftige Gase.
	ET	Kokkupuutel hapetega eraldub väga mürgine gaas.
	EL	
	EN	Contact with acids liberates very toxic gas.
	FR	Au contact d'un acide, dégage un gaz très toxique.

EUH 032	Language	
	GA	I dteagmháil le haigéid scaoiltear gás an-tocsaineach.
	IT	A contatto con acidi libera gas molto tossici.
	LV	Saskaroties ar skābēm, izdala ļoti toksiskas gāzes.
	LT	Kontaktuodama su rūgštimis išskiria labai toksiškas dujas.
	HU	Savval érintkezve nagyon mérgező gázok képződnek.
	MT	Jitfa' gass tossiku ta'afna meta jmiss l-idji.
	NL	Vormt zeer giftig gas in contact met zuren.
	PL	W kontakcie z kwasami uwalnia bardzo toksyczne gazy.
	PT	Em contacto com ácidos liberta gases muito tóxicos.
	RO	În contact cu acizi, degajă un gaz foarte toxic.
	SK	Pri kontakte s kyselinami uvoľní veľmi toxický plyn.
	SL	V stiku s kislinami se sprošča zelo strupen plin.
	FI	Kehittää erittäin myrkyllistä kaasua hapon kanssa.
	SV	Utvecklar mycket giftig gas vid kontakt med syra.

EUH 066	Language	
	BG	
	ES	La exposición repetida puede provocar sequedad o formación de grietas en la piel.
	CS	Opakovaná expozice může způsobit vysušení nebo popraskání kůže.

EUH 066	Language	
	DA	Gentagen kontakt kan give tør eller revnet hud.
	DE	Wiederholter Kontakt kann zu spröder oder rissiger Haut führen.
	ET	Korduv kokkupuude võib põhjustada naha kuivust või lõhenemist.
	EL	
	EN	Repeated exposure may cause skin dryness or cracking.
	FR	L'exposition répétée peut provoquer dessèchement ou gerçures de la peau.
	GA	D'fhéadfadh tirimeacht chraicinn nó scoilteadh craicinn a bheith mar thoradh ar ilnochtadh.
	IT	L'esposizione ripetuta può provocare secchezza o screpolature della pelle.
	LV	Atk•rtota iedarb•ba var rad•t sausu •du vai izrais•t t•s spr•g•šanu.
	LT	Pakartotinis poveikis gali sukelti odos dži•vim• arba skilin•jim•.
	HU	Ismétl•d• expozíció a b•r kizáradását vagy megrepedezését okozhatja.
	MT	Espo•izzjoni ripetuta tista' tikka•una nxif jew qsim tal-•ilda.
	NL	Herhaalde blootstelling kan een droge of een gebarsten huid veroorzaken.
	PL	Powtarzaj•ce si• nara•enie mo•e powodowa• wysuszenie lub p•kanie skóry.
	PT	Pode provocar pele seca ou gretada, por exposição repetida.
	RO	Expunerea repetat• poate provoca uscarea sau cr•parea pielii.

EUH 066	Language	
	SK	Opakovaná expozícia môže spôsobiť vysušenie alebo popraskanie pokožky.
	SL	Ponavljajoča izpostavljenost lahko povzroči nastanek suhe ali razpokane kože.
	FI	Toistuva altistus voi aiheuttaa ihon kuivumista tai halkeilua.
	SV	Upprepad kontakt kan ge torr hud eller hudsprickor.

EUH 070	Language	
	BG	••••••
	ES	Tóxico en contacto con los ojos.
	CS	Toxický při styku s očima.
	DA	Giftig ved kontakt med øjnene.
	DE	Giftig bei Berührung mit den Augen.
	ET	Silma sattumisel mürgine.
	EL	
	EN	Toxic by eye contact.
	FR	Toxique par contact oculaire.
	GA	Tocsaineach trí theagmháil leis an tsúil.
	IT	Tossico per contatto oculare.
	LV	Toksisks saskarā ar acīm.
	LT	Toksiška patekus akis.

EUH 070	Language	
	HU	Szembe kerülve mérgező.
	MT	Tossiku meta jmiss ma' l-g•ajnejn.
	NL	Giftig bij oogcontact.
	PL	Dzia•a toksycznie w kontakcie z oczami.
	PT	Tóxico por contacto com os olhos.
	RO	Toxic în caz de contact cu ochii.
	SK	Toxické pri kontakte s o•ami.
	SL	Strupeno ob stiku z o•mi.
	FI	Myrkyllistä joutuessaan silmään.
	SV	Giftigt vid kontakt med ögonen.

EUH071	Language	
	BG	
	ES	Corrosivo para las vías respiratorias.
	CS	Zp•sobuje poleptání dýchacích cest.
	DA	Ætsende for luftvejene.
	DE	Wirkt ätzend auf die Atemwege.
	ET	Söövitav hingamisteedele.
	EL	.
	EN	Corrosive to the respiratory tract.
	FR	Corrosif pour les voies respiratoires.

EUH071	Language	
	GA	Creimneach don chonair riospráide.
	IT	Corrosivo per le vie respiratorie.
	LV	Kod·gs elpce·iem.
	LT	•sdina kv•pavimo takus.
	HU	Maró hatású a légutakra.
	MT	Korru•iv g•as-sistema respiratorja.
	NL	Bijtend voor de luchtwegen.
	PL	Dzia•a •r•co na drogi oddechowe.
	PT	Corrosivo para as vias respiratórias.
	RO	Corosiv pentru c•ile respiratorii.
	SK	Žieravé pre dýchacie cesty.
	SL	Jedko za dihalne poti.
	FI	Hengityselimiä syövyttävää.
	SV	Frätande på luftvägarna.

3. PART 3: SUPPLEMENTAL LABEL ELEMENTS / INFORMATION ON CERTAIN MIXTURES

EUH 201/ 201A	Language	
	BG	
	ES	<p>Contiene plomo. No utilizar en objetos que los niños puedan masticar o chupar.</p> <p>¡Atención! Contiene plomo.</p>
	CS	<p>Obsahuje olovo. Nemá se používat na povrchy, které mohou okusovat nebo olizovat d•ti.</p> <p>Pozor! Obsahuje olovo.</p>
	DA	<p>Indeholder bly. Må ikke anvendes på genstande, som børn vil kunne tygge eller sutte på.</p> <p>Advarsel! Indeholder bly.</p>
	DE	<p>Enthält Blei. Nicht für den Anstrich von Gegenständen verwenden, die von Kindern gekaut oder gelutscht werden könnten.</p> <p>Achtung! Enthält Blei.</p>
	ET	<p>Sisaldab pliid. Mitte kasutada pindadel, mida lapsed võivad närida või imeda.</p> <p>Ettevaatust! Sisaldab pliid.</p>
	EL	<p>••••••!</p>
	EN	<p>Contains lead. Should not be used on surfaces liable to be chewed or sucked by children.</p> <p>Warning! Contains lead.</p>

EUH 201/ 201A	Language	
	FR	<p>Contient du plomb. Ne pas utiliser sur les objets susceptibles d'être mâchés ou sucés par des enfants.</p> <p>Attention! Contient du plomb.</p>
	GA	<p>Luaidhe ann. Níor chóir a úsáid ar dhromchlaí a d'fhéadfadh a bheith á gcogaint nó á sú ag leanaí.</p> <p>Rabhadh! Luaidhe ann.</p>
	IT	<p>Contiene piombo. Non utilizzare su oggetti che possono essere masticati o succhiati dai bambini.</p> <p>Attenzione! Contiene piombo.</p>
	LV	<p>Satur svinu. Nedr•kst lietot uz virsm•m, kuras var non•kt b•rnam mut•.</p> <p>Br•din•jums! Satur svinu.</p>
	LT	<p>Sud•tyje yra švino. Nenaudoti paviršiams, kurie gali b•ti vaik•kramtomi arba •iulpiami.</p> <p>Atsargiai! Sud•tyje yra švino.</p>
	HU	<p>Ólmot tartalmaz. Tilos olyan felületeken használni, amelyeket gyermekek szájukba vehetnek.</p> <p>Figyelem! Ólmot tartalmaz.</p>
	MT	<p>Fih i••omb. M'g•andux jintu•a' fuq u•uh li x'aktarx jomog•duhom jew jerdg•uhom it-tfal.</p> <p>Twissija! Fih i••omb.</p>
	NL	<p>Bevat lood. Mag niet worden gebruikt voor voorwerpen waarin kinderen kunnen bijten of waaraan kinderen kunnen zuigen.</p> <p>Let op! Bevat lood.</p>
	PL	<p>Zawiera o•ów. Nie nale•y stosowa• na powierzchniach, które mog• by• gryzione lub ssane przez dzieci.</p> <p>Uwaga! Zawiera o•ów.</p>

EUH 201/ 201A	Language	
	PT	<p>Contém chumbo. Não utilizar em superfícies que possam ser mordidas ou chupadas por crianças.</p> <p>Atenção! Contém chumbo.</p>
	RO	<p>Conține plumb. A nu se utiliza pe obiecte care pot fi mestecate sau supte de copii.</p> <p>Atenție! Conține plumb.</p>
	SK	<p>Obsahuje olovo. Nepoužívajte na povrchy, ktoré by mohli žuť alebo oblizovať deti.</p> <p>Pozor! Obsahuje olovo.</p>
	SL	<p>Vsebuje svinec. Ne sme se nanašati na površine, ki bi jih lahko žvečili ali sesali otroci.</p> <p>Pozor! Vsebuje svinec.</p>
	FI	<p>Sisältää lyijyä. Ei saa käyttää pintoihin, joita lapset voivat pureksella tai imeä.</p> <p>Varoitus! Sisältää lyijyä.</p>
	SV	<p>Innehåller bly. Bör inte användas på ytor där barn kan komma åt att tugga eller suga.</p> <p>Varning! Innehåller bly.</p>

EUH 202	Language	
	BG	<p>.....</p> <p>.....</p>
	ES	<p>Cianoacrilato. Peligro. Se adhiere a la piel y a los ojos en pocos segundos. Mantener fuera del alcance de los niños.</p>
	CS	<p>Kyanoakrylát. Nebezpečí. Okamžitě slepuje kůže a oči. Uchovávejte mimo dosah dětí.</p>

EUH 202	Language	
	DA	Cyanoacrylat. Farligt. Klæber til huden og øjnene på få sekunder. Opbevares utilgængeligt for børn.
	DE	Cyanacrylat. Gefahr. Klebt innerhalb von Sekunden Haut und Augenlider zusammen. Darf nicht in die Hände von Kindern gelangen.
	ET	Tsüanoakrülaat. Ohtlik. Liimib naha ja silmad hetkega. Hoida lastele kättesaamatus kohas.
	EL	
	EN	Cyanoacrylate. Danger. Bonds skin and eyes in seconds. Keep out of the reach of children.
	FR	Cyanoacrylate. Danger. Colle à la peau et aux yeux en quelques secondes. À conserver hors de portée des enfants.
	GA	Cianaicrioláit. Contúirt. Nascann craiceann agus súile laistigh de shoicindí. Coimeád as aimsiú leanaí.
	IT	Cianoacrilato. Pericolo. Incolla la pelle e gli occhi in pochi secondi. Tenere fuori dalla portata dei bambini.
	LV	Ci•nakril•ts. B•stami. Iedarb•ba uz ac•m un •du t•l•t•ja. Sarg•t no b•rniem.
	LT	Cianakrilatas. Pavojinga. Staigiai suklijuoja od• ir akis. Laikyti vaikams neprieinamoje vietoje.
	HU	Cianoakrilát. Veszély! Néhány másodperc alatt a b•rre és a szembe ragad. Gyermekekt•l elzárva tartandó.
	MT	Cyanoacrylate. Periklu. Iwa••al il••ilda u l-g•ajnejn fi ftit sekondi. •omm 'il bog•od minn fejn jistg•u jil•quh it-tfal.
	NL	Cyanoacrylaat. Gevaarlijk. Kleeft binnen enkele seconden aan huid en oogleden. Buiten het bereik van kinderen houden.
	PL	Cyjanoakrylany. Niebezpiecze•stwo. Skleja skór• i powieki w ci•gu kilku sekund. Chroni• przed dzie•mi.

EUH 202	Language	
	PT	Cianoacrilato. Perigo. Cola à pele e aos olhos em poucos segundos. Manter for a do alcance das crianças.
	RO	Cianoacrilat. Pericol. Se lipe•te de piele •i ochi în câteva secunde. A nu se l•sa la îndemâna copiilor.
	SK	Kyanoakrylát. Nebezpe•enstvo. V priebehu niekoľkých sekúnd zlepí pokožku a o•i. Uchovávajte mimo dosahu detí.
	SL	Cianoakrilat. Nevarno. Kožo in o•i zlepi v nekaj sekundah. Hraniti zunaj dosega otrok.
	FI	Syanoakrylaattia. Vaara. Liimaa ihon ja silmät hetkessä. Säilytettävä lasten ulottumattomissa.
	SV	Cyanoakrylat. Fara. Fäster snabbt på hud och ögon. Förvaras oåtkomligt för barn.

EUH 203	Language	
	BG	•••••••• (VI). ••••••••••
	ES	Contiene cromo (VI). Puede provocar una reacción alérgica.
	CS	Obsahuje chrom (VI). M•že vyvolat alergickou reakci.
	DA	Indeholder krom (VI). Kan udløse allergisk reaktion.
	DE	Enthält Chrom (VI). Kann allergische Reaktionen hervorrufen.
	ET	Sisaldab kroomi (VI). Võib esile kutsuda allergilise reaktsiooni.
	EL	(VI).
	EN	Contains chromium (VI). May produce an allergic reaction.
	FR	Contient du chrome (VI). Peut produire une réaction allergique.

EUH 203	Language	
	GA	Cróimiam (VI) ann. D'fhéadfadh sé a bheith ina chúis le frithghníomh ailléirgeach.
	IT	Contiene cromo (VI). Può provocare una reazione allergica.
	LV	Satur hromu (VI). Var izrais•t aler•isku reakciju.
	LT	Sud•tyje yra chromo (VI). Gali sukelti alergin• reakcij•.
	HU	Krómot (VI) tartalmaz. Allergiás reakciót válthat ki.
	MT	Fih il-kromju (VI). Jista' jo•loq reazzjoni aller•ika.
	NL	Bevat zeswaardig chroom. Kan een allergische reactie veroorzaken.
	PL	Zawiera chrom (VI). Mo•e powodowa• wyst•pienie reakcji alergicznej.
	PT	Contém crómio (VI). Pode provocar uma reacção alérgica.
	RO	Con•ine crom (VI). Poate provoca o reac•ie alergic•.
	SK	Obsahuje chróm (VI). Môže vyvola• alergickú reakciu.
	SL	Vsebuje krom (VI). Lahko povzro•i alergijski odziv.
	FI	Sisältää kromi(VI)-yhdisteitä. Voi aiheuttaa allergisen reaktion.
	SV	Innehåller krom (VI). Kan orsaka en allergisk reaktion.

EUH 204	Language	
	BG	.....
	ES	Contiene isocianatos. Puede provocar una reacción alérgica.
	CS	Obsahuje isokyanáty. M•že vyvolat alergickou reakci.

EUH 204	Language	
	DA	Indeholder isocyanater. Kan udløse allergisk reaktion.
	DE	Enthält Isocyanate. Kann allergische Reaktionen hervorrufen.
	ET	Sisaldab isotsüanaate. Võib esile kutsuda allergilise reaktsiooni.
	EL	
	EN	Contains isocyanates. May produce an allergic reaction.
	FR	Contient des isocyanates. Peut produire une réaction allergique.
	GA	Isicianaítí ann. D'fhéadfadh sé a bheith ina chúis le frithghníomh ailléirgeach.
	IT	Contiene isocianati. Può provocare una reazione allergica.
	LV	Satur izocian•tus. Var izrais•t aler•isku reakciju.
	LT	Sud•tyje yra izocianat•. Gali sukelti alerģin• reakcij•.
	HU	Izocianátokat tartalmaz. Allergiás reakciót válthat ki.
	MT	Fih l-isocyanates. Jista' jag•mel reazzjoni aller•ika.
	NL	Bevat isocyanaten. Kan een allergische reactie veroorzaken.
	PL	Zawiera izocyjaniany. Mo•e powodowa• wyst•pienie reakcji alergicznej.
	PT	Contém isocianatos. Pode provocar uma reacção alérgica.
	RO	Con•ine izociana•i. Poate provoca o reac•ie alergic•.
	SK	Obsahuje izokyanáty. Môže vyvola• alergickú reakciu.
	SL	Vsebuje izocianate. Lahko povzro•i alergijski odziv.
	FI	Sisältää isosyanaatteja. Voi aiheuttaa allergisen reaktion.

EUH 204	Language	
	SV	Innehåller isocyanater. Kan orsaka en allergisk reaktion.

EUH 205	Language	
	BG	.....
	ES	Contiene componentes epoxídicos. Puede provocar una reacción alérgica.
	CS	Obsahuje epoxidové složky. Může vyvolat alergickou reakci.
	DA	Indeholder epoxyforbindelser. Kan udløse allergisk reaktion.
	DE	Enthält epoxidhaltige Verbindungen. Kann allergische Reaktionen hervorrufen.
	ET	Sisaldab epoksükomponente. Võib esile kutsuda allergilise reaktsiooni.
	EL	
	EN	Contains epoxy constituents. May produce an allergic reaction.
	FR	Contient des composés époxydiques. Peut produire une réaction allergique.
	GA	Comhábhair eapocsacha ann. D'fhéadfadh sé a bheith ina chúis le frithghníomh ailléirgeach.
	IT	Contiene componenti epossidici. Può provocare una reazione allergica.
	LV	Satur epoksda sastvdaas. Var izraisīt alerisku reakciju.
	LT	Sudtyje yra epoksidini komponent. Gali sukelti alerginį reakcij.

EUH 205	Language	
	HU	Epoxid tartalmú vegyületeket tartalmaz. Allergiás reakciót válthat ki.
	MT	Fih kostitwenti ta' l-eposside. Jista' jag•mel reazzjoni aller•ika.
	NL	Bevat epoxyverbindingen. Kan een allergische reactie veroorzaken.
	PL	Zawiera sk•adniki epoksydowe. Mo•e powodowa• wyst•pienie reakcji alergicznej.
	PT	Contém componentes epoxídicos. Pode provocar uma reacção alérgica.
	RO	Con•ine componen•i epoxidici. Poate provoca o reac•ie alergic•.
	SK	Obsahuje epoxidové zložky. Môže vyvola• alergickú reakciu.
	SL	Vsebuje epoksidne sestavine. Lahko povzro•i alergijski odziv.
	FI	Sisältää epoksihartseja. Voi aiheuttaa allergisen reaktion.
	SV	Innehåller epoxiförening. Kan orsaka en allergisk reaktion.

EUH 206	Language	
	BG	<p>.....!</p> <p>..... (.....).</p>
	ES	¡Atención! No utilizar junto con otros productos. Puede desprender gases peligrosos (cloro).
	CS	Pozor! Nepoužívejte společně s jinými výrobky. Může uvolňovat nebezpečné plyny (chlor).
	DA	Advarsel! Må ikke anvendes i forbindelse med andre produkter. Farlige luftarter (chlor) kan frigøres.

EUH 206	Language	
	DE	Achtung! Nicht zusammen mit anderen Produkten verwenden, da gefährliche Gase (Chlor) freigesetzt werden können.
	ET	Ettevaatust! Mitte kasutada koos teiste toodetega. Segust võib eralduda ohtlikke gaase (kloori).
	EL	••••••! ••••
	EN	Warning! Do not use together with other products. May release dangerous gases (chlorine).
	FR	Attention! Ne pas utiliser en combinaison avec d'autres produits. Peut libérer des gaz dangereux (chlore).
	GA	Rabhadh! Ná húsáid in éineacht le táirgí eile. D'fhéadfadh sé go scaoilfí gás chontúirteacha (clóirín).
	IT	Attenzione! Non utilizzare in combinazione con altri prodotti. Possono liberarsi gas pericolosi (cloro).
	LV	Brīdinājums! Nelietot kopā ar citiem produktiem. Var izdalīties bīstamas gāzes (hloru).
	LT	Atsargiai! Nenaudoti kartu su kitais produktais. Gali išskirti pavojingas dujas (chloro).
	HU	Figyelem! Tilos más termékekkel együtt használni. Veszélyes gázok (klór) szabadulhatnak fel.
	MT	Twissija! Tuq ahx flimkien ma' prodotti oqra. Jista' jers i gassijiet perikoluq (kloru).
	NL	Let op! Niet in combinatie met andere producten gebruiken. Er kunnen gevaarlijke gassen (chloor) vrijkomen.
	PL	Uwaga! Nie stosować razem z innymi produktami. Może wydzielone niebezpieczne gazy (chlor).
	PT	Atenção! Não utilizar juntamente com outros produtos. Podem libertar-se gases perigosos (cloro).

EUH 206	Language	
	RO	Aten•ie! A nu se folosi împreun• cu alte produse. Poate elibera gaze periculoase (clor).
	SK	Pozor! Nepoužívajte spolu s inými výrobkami. Môžu uvo••ova• nebezpe•né plyny (chlór).
	SL	Pozor! Ne uporabljajte skupaj z drugimi izdelki. Lahko se sproš•ajo nevarni plini (klor).
	FI	Varoitus! Älä käytä yhdessä muiden tuotteiden kanssa. Tuotteesta voi vapautua vaarallista kaasua (klooria).
	SV	Varning! Får ej användas tillsammans med andra produkter. Kan avge farliga gaser (klor).

EUH 207	Language	
	BG	••••••••! ••••••••••••••••••• •• •••••••••••••••••••••••• •• •••••••••••••••••••••••• ••
	ES	¡Atención! Contiene cadmio. Durante su utilización se desprenden vapores peligrosos. Ver la información facilitada por el fabricante. Seguir las instrucciones de seguridad.
	CS	Pozor! Obsahuje kadmium. Při používání vznikají nebezpečné výpary. Viz informace dodané výrobcem. Dodržujte bezpečnostní pokyny.
	DA	Advarsel! Indeholder cadmium. Der udvikles farlige dampe under anvendelsen. Se producentens oplysninger. Overhold sikkerhedsforskrifterne.
	DE	Achtung! Enthält Cadmium. Bei der Verwendung entstehen gefährliche Dämpfe. Hinweise des Herstellers beachten. Sicherheitsanweisungen einhalten.
	ET	Ettevaatust! Sisaldab kaadmiumi. Kasutamisel moodustuvad ohtlikud aurud. Vt tootja esitatud teavet. Järgida ohutuseeskirju.

EUH 207	Language	
	EL	••••••!
	EN	Warning! Contains cadmium. Dangerous fumes are formed during use. See information supplied by the manufacturer. Comply with the safety instructions.
	FR	Attention! Contient du cadmium. Des fumées dangereuses se développent pendant l'utilisation. Voir les informations fournies par le fabricant. Respectez les consignes de sécurité.
	GA	Rabhadh! Caidmiam ann. Cruthaítear múch chontúirteach le linn a úsáide. Féach an fhaisnéis atá curtha ar fáil ag an monaróir. Cloígh leis na treoracha sábháilteachta.
	IT	Attenzione! Contiene cadmio. Durante l'uso si sviluppano fumi pericolosi. Leggere le informazioni fornite dal fabbricante. Rispettare le disposizioni di sicurezza.
	LV	Br•din•jums! Satur kadmiju. Lietojot veidojas b•stami izgarojumi. Sk. ražot•ja sniegto inform•ciju. Iev•rot droš•bas instrukcijas.
	LT	Atsargiai! Sud•tyje yra kadmio. Naudojant susidaro pavojingi garai. Ži•r•ti gamintojo pateikt• informacij•. Vykdyti saugos instrukcijas.
	HU	Figyelem! Kadmiumot tartalmaz! A használat során veszélyes füstök képz•dnek. Lásd a gyártó által közölt információt. Be kell tartani a biztonsági el•írásokat.
	MT	Twissija! Fih il-kadmju. Waqt li jintu•a jiffurmaw d•a•en perikolu•i. Ara l-informazzjoni mog•tija mill-fabbrikant. •ares l-istruzzjonijiet dwar is-sigurtà.
	NL	Let op! Bevat cadmium. Bij het gebruik ontwikkelen zich gevaarlijke dampen. Zie de aanwijzingen van de fabrikant. Neem de veiligheidsvoorschriften in acht.

EUH 207	Language	
	PL	Uwaga! Zawiera kadm. Podczas stosowania wydziela niebezpieczne pary. Zapoznaj się z informacjami dostarczonymi przez producenta. Przestrzegaj instrukcji bezpiecznego stosowania.
	PT	Atenção! Contém cádmio. Libertam-se fumos perigosos durante a utilização. Ver as informações fornecidas pelo fabricante. Respeitar as instruções de segurança.
	RO	Atenție! Conține cadmiu. În timpul utilizării se degajă un fum periculos. A se vedea informațiile furnizate de producător. A se respecta instrucțiunile privind siguranța.
	SK	Pozor! Obsahuje kadmium. Pri používaní sa tvorí nebezpečný dym. Pozri informácie od výrobcu. Dodržiavajte bezpečnostné pokyny.
	SL	Pozor! Vsebuje kadmij. Med uporabo nastajajo nevarni dimi. Preberite informacije proizvajalca. Upoštevajte navodila za varno uporabo.
	FI	Varoitus! Sisältää kadmiumia. Käytettäessä muodostuu vaarallisia huuruja. Noudata valmistajan antamia ohjeita. Noudata turvallisuusohjeita.
	SV	Varning! Innehåller kadmium. Farliga ångor bildas vid användning. Se information från tillverkaren. Följ skyddsanvisningarna.

EUH 208	Language	
	BG <>.
	ES	Contiene <nombre de la sustancia sensibilizante>. Puede provocar una reacción alérgica.
	CS	Obsahuje <název senzibilizující látky>. Může vyvolat alergickou reakci.

EUH 208	Language	
	DA	Indeholder <navn på det sensibiliserende stof>. Kan udløse allergisk reaktion.
	DE	Enthält <Name des sensibilisierenden Stoffes>. Kann allergische Reaktionen hervorrufen.
	ET	Sisaldab <sensibiliseeriva aine nimetus>. Võib esile kutsuda allergilise reaktsiooni.
	EL	•••••••• < >.
	EN	Contains <name of sensitising substance>. May produce an allergic reaction.
	FR	Contient <nom de la substance sensibilisante>. Peut produire une réaction allergique.
	GA	<Ainm na substainte íograithe> ann. D'fhéadfadh sé a bheith ina chúis le frithghníomh ailléirgeach.
	IT	Contiene <denominazione della sostanza sensibilizzante>. Può provocare una reazione allergica.
	LV	Satur <sensibiliz•još•s vielas nosaukums>. Var izraisīt aler•isku reakciju.
	LT	Sud•tyje yra <jautrinan•ios medžiagos pavadinimas>. Gali sukelti alergin• reakcij•.
	HU	<Allergén anyag neve>-t tartalmaz. Allergiás reakciót válthat ki.
	MT	Fih <l-isem tas-sustanza sensibbli>. Jista' jag•mel reazzjoni aller•ika.
	NL	Bevat <naam van de sensibiliserende stof>. Kan een allergische reactie veroorzaken.
	PL	Zawiera <nazwa substancji uczulaj•cej>. Mo•e powodowa• wyst•pienie reakcji alergicznej.

EUH 208	Language	
	PT	Contém <nome da substância sensibilizante em questão>. Pode provocar uma reacção alérgica.
	RO	Conține <denumirea substanței sensibilizante>. Poate provoca o reacție alergică.
	SK	Obsahuje <názov senzibilizujúcej látky>. Môže vyvolať alergickú reakciu.
	SL	Vsebuje <ime snovi, ki povzročata preobutljivost>. Lahko povzroči alergijski odziv.
	FI	Sisältää <herkistävän aineen nimi>. Voi aiheuttaa allergisen reaktion.
	SV	Innehåller <namnet på det sensibiliserande ämnet>. Kan orsaka en allergisk reaktion.

EUH 209/ 209A	Language	
	BG	<p>••• ••••••••••••••••</p> <p>••• ••••••••••••</p>
	ES	<p>Puede inflamarse fácilmente al usarlo</p> <p>Puede inflamarse al usarlo.</p>
	CS	<p>Při používání se může stát vysoce hořlavým.</p> <p>Při používání se může stát hořlavým.</p>
	DA	<p>Kan blive meget brandfarlig ved brug.</p> <p>Kan blive brandfarlig ved brug.</p>
	DE	<p>Kann bei Verwendung leicht entzündbar werden.</p> <p>Kann bei Verwendung entzündbar werden.</p>

EUH 209/ 209A	Language	
	ET	Kasutamisel võib muutuda väga tuleohtlikuks. Kasutamisel võib muutuda tuleohtlikuks.
	EL	..... M
	EN	Can become highly flammable in use. Can become flammable in use.
	FR	Peut devenir facilement inflammable en cours d'utilisation. Peut devenir inflammable en cours d'utilisation.
	GA	D'fhéadfadh sé éirí an-inadhainte agus é á úsáid. D'fhéadfadh sé éirí inadhainte agus é á úsáid.
	IT	Può diventare facilmente infiammabile durante l'uso. Può diventare infiammabile durante l'uso.
	LV	Lietojot var viegli uzliesmot. K••t uzliesmojš.
	LT	Naudojama gali tapti labai degi. Naudojama gali tapti degi.
	HU	A használat során fokozottan t•zveszélyessé válhat. A használat során t•zveszélyessé válhat.
	MT	Jista' jie•u n-nar fa•ilment meta jintu•a. Jista' jie•u n-nar meta jintu•a.
	NL	Kan bij gebruik licht ontvlambaar worden. Kan bij gebruik ontvlambaar worden.

EUH 209/ 209A	Language	
	PL	<p>Podczas stosowania może przekształcić się w substancję wysoce łatwopalną.</p> <p>Podczas stosowania może przekształcić się w substancję łatwopalną.</p>
	PT	<p>Pode tornar-se facilmente inflamável durante o uso.</p> <p>Pode tornar-se inflamável durante o uso.</p>
	RO	<p>Poate deveni foarte inflamabil în timpul utilizării.</p> <p>Poate deveni inflamabil în timpul utilizării.</p>
	SK	<p>Pri používaní sa môže stať veľmi horľavou.</p> <p>Pri používaní sa môže stať horľavou.</p>
	SL	<p>Med uporabo utegne postati lahko vnetljivo.</p> <p>Med uporabo utegne postati vnetljivo.</p>
	FI	<p>Voi muuttua helposti syttyväksi käytössä.</p> <p>Voi muuttua syttyväksi käytössä.</p>
	SV	<p>Kan bli mycket brandfarligt vid användning.</p> <p>Kan bli brandfarligt vid användning.</p>

EUH 210	Language	
	BG	<p>•••• ••••• •••••</p> <p>•••</p>
	ES	<p>Puede solicitarse la ficha de datos de seguridad.</p>
	CS	<p>Na vyžádání je k dispozici bezpečnostní list.</p>
	DA	<p>Sikkerhedsdatablad kan på anmodning rekvireres.</p>

EUH 210	Language	
	DE	Sicherheitsdatenblatt auf Anfrage erhältlich.
	ET	Ohutuskaart nõudmisel kättesaadav.
	EL	
	EN	Safety data sheet available on request.
	FR	Fiche de données de sécurité disponible sur demande.
	GA	Bileog sonraí sábháilteachta ar fáil arna iarraidh sin.
	IT	Scheda dati di sicurezza disponibile su richiesta.
	LV	Drošības datu lapa ir pieejama pēc pieprasījuma.
	LT	Saugos duomenų lapas galima gauti paprašius.
	HU	Kérésre biztonsági adatlap kapható.
	MT	Il-karta tad-data dwar is-sikurezza hija disponibbli meta tintalab.
	NL	Veiligheidsinformatieblad op verzoek verkrijgbaar.
	PL	Karta charakterystyki dostępną na żądanie.
	PT	Ficha de segurança fornecida a pedido.
	RO	Fișă cu date de securitate disponibilă la cerere.
	SK	Na požiadanie možno poskytnúť kartu bezpečnostných údajov.
	SL	Varnostni list na voljo na zahtevo.
	FI	Käyttöturvallisuustiedote toimitetaan pyynnöstä.
	SV	Säkerhetsdatablad finns att rekvidera.

EUH 401	Language	
	BG	••••• •• •••••••••••••• •••••,
	ES	A fin de evitar riesgos para las personas y el medio ambiente, siga las instrucciones de uso.
	CS	Dodržujte pokyny pro používání, abyste se vyvarovali rizik pro lidské zdraví a životní prostředí.
	DA	Brugsanvisningen skal følges for ikke at bringe menneskers sundhed og miljøet i fare.
	DE	Zur Vermeidung von Risiken für Mensch und Umwelt die Gebrauchsanleitung einhalten.
	ET	Inimeste tervise ja keskkonna ohustamise vältimiseks järgida kasutusjuhendit.
	EL	
	EN	To avoid risks to human health and the environment, comply with the instructions for use.
	FR	Respectez les instructions d'utilisation pour éviter les risques pour la santé humaine et l'environnement.
	GA	Chun príacaíl do shláinte an duine agus don chomhshaol a sheachaint, cloígh leis na teoracha maidir le húsáid.
	IT	Per evitare rischi per la salute umana e per l'ambiente, seguire le istruzioni per l'uso.
	LT	Siekiant išvengti žmonių sveikatai ir aplinkai keliamos rizikos, būtina vykdyti naudojimo instrukcijos nurodymus.
	LV	Lai izvairītos no riska cilvēku veselībai un videi, ievērojiet lietošanas pamcību.
	HU	Az emberi egészség és a környezet veszélyeztetésének elkerülése érdekében be kell tartani a használati utasítás elírásait.

EUH 401	Language	
	MT	Biex ji•u evitati r-riskji g•al sa••et il-bniedem u g•all-ambjent, •ares l-istruzzjonijiet dwar l-u•u.
	NL	Volg de gebruiksaanwijzing om gevaar voor de menselijke gezondheid en het milieu te voorkomen.
	PL	W celu unikni•cia zagro•e• dla zdrowia ludzi i •rodowiska, nale•y post•powa• zgodnie z instrukcj• u•ycia.
	PT	Para evitar riscos para a sa•de humana e para o ambiente, respeitar as instru••es de utiliza••o.
	RO	Pentru a evita riscurile pentru s•n•tatea uman• •i mediu, a se respecta instruc•iunile de utilizare.
	SK	Dodr•iavajte n•vod na pou••vanie, aby ste zabr•nili vzniku riz•k pre zdravie •ud• a •ivotn• prostredie.
	SL	Da bi se izognili tveganjem za ljudi in okolje, ravnajte v skladu z navodili za uporabo.
	FI	Noudata k•ytt•ohjeita ihmisen terveydelle ja ymp•rist•lle aiheutuvien vaarojen v•ltt•miseksi.
	SV	F•r att undvika risker f•r m•nniskors h•lsa och f•r milj•n, f•lj bruksanvisningen.

ANNEX IV

List of Precautionary Statements

In selecting the precautionary statements in accordance with Articles 22 and 28(3), suppliers may combine the Precautionary Statements in the table below, having regard to clarity and comprehensibility of the precautionary advice.

1. PART 1: CRITERIA FOR THE SELECTION OF PRECAUTIONARY STATEMENTS

Table 6.1
Precautionary statements – General

Code (1)	General precautionary statements (2)	Hazard class (3)	Hazard category (4)	Conditions for use (5)
P101	If medical advice is needed, have product container or label at hand.	as appropriate		Consumer products
P102	Keep out of reach of children.	as appropriate		Consumer products
P103	Read label before use.	as appropriate		Consumer products

Table 6.2
Precautionary statements – Prevention

Code	Prevention precautionary statements	Hazard class	Hazard category	Conditions for use
(1)	(2)	(3)	(4)	(5)
P201	Obtain special instructions before use.	Explosives (section 2.1)	Unstable explosive	
		Germ cell mutagenicity (section 3.5)	1A, 1B, 2	
		Carcinogenicity (section 3.6)	1A, 1B, 2	
		Reproductive toxicity (section 3.7)	1A, 1B, 2	
		Reproductive toxicity – effects on or via lactation (section 3.7)	Additional category	
P202	Do not handle until all safety precautions have been read and understood.	Explosives (section 2.1)	Unstable explosive	
		Germ cell mutagenicity (section 3.5)	1A, 1B, 2	
		Carcinogenicity (section 3.6)	1A, 1B, 2	
		Reproductive toxicity (section 3.7)	1A, 1B, 2	

Code (1)	Prevention precautionary statements (2)	Hazard class (3)	Hazard category (4)	Conditions for use (5)	
P210	Keep away from heat/sparks/open flames/hot surfaces. – No smoking.	Explosives (section 2.1)	Divisions 1.1, 1.2, 1.3, 1.4, 1.5	Manufacturer/supplier to specify applicable ignition source(s).	
		Flammable gases (section 2.2)	1, 2		
		Flammable aerosols (section 2.3)	1, 2		
		Flammable liquids (section 2.6)	1, 2, 3		
		Flammable solids (section 2.7)	1, 2		
		Self-reactive substances and mixtures (section 2.8)	Types A, B, C, D, E, F		
		Pyrophoric liquids (section 2.9)	1		
		Pyrophoric solids (section 2.10)	1		
		Organic peroxides (section 2.15)	Types A, B, C, D, E, F		– <i>Specify to keep away from heat.</i>
		Oxidising liquids (section 2.13)	1, 2, 3		
		Oxidising solids (section 2.14)	1, 2, 3		
		P211	Do not spray on an open flame or other ignition source.	Flammable aerosols (section 2.3)	1, 2

Code (1)	Prevention precautionary statements (2)	Hazard class (3)	Hazard category (4)	Conditions for use (5)
P220	Keep/Store away from clothing/.../combustible materials.	Oxidising gases (section 2.4)	1	... Manufacturer/supplier to specify incompatible materials.
		Self-reactive substances and mixtures (section 2.8)	Types A, B, C, D, E, F	
		Oxidising liquids (section 2.13)	1	... Manufacturer/supplier to specify incompatible materials. – <i>specify to keep away from clothing as well as other incompatible materials.</i>
			2, 3		... Manufacturer/supplier to specify incompatible materials.
		Oxidising solids (section 2.14)	1	... Manufacturer/supplier to specify incompatible materials. – <i>specify to keep away from clothing as well as other incompatible materials.</i>
			2, 3	
		Organic peroxides (section 2.15)	Types A, B, C, D, E, F	... Manufacturer/supplier to specify incompatible materials.

Code (1)	Prevention precautionary statements (2)	Hazard class (3)	Hazard category (4)	Conditions for use (5)
P221	Take any precaution to avoid mixing with combustibles/...	Oxidising liquids (section 2.13)	1, 2, 3	... Manufacturer/supplier to specify incompatible materials.
		Oxidising solids (section 2.14)	1, 2, 3	
P222	Do not allow contact with air.	Pyrophoric liquids (section 2.9)	1	
		Pyrophoric solids (section 2.10)	1	
P223	Keep away from any possible contact with water, because of violent reaction and possible flash fire.	Substances and mixtures which, in contact with water, emit flammable gases (section 2.12)	1, 2	
P230	Keep wetted with ...	Explosives (section 2.1)	Divisions 1.1, 1.2, 1.3, 1.5	... Manufacturer/supplier to specify appropriate material. – <i>if drying out increases explosion hazard, except as needed for manufacturing or operating processes (e.g. nitrocellulose).</i>

Code	Prevention precautionary statements	Hazard class	Hazard category	Conditions for use
(1)	(2)	(3)	(4)	(5)
P231	Handle under inert gas.	Substances and mixtures which, in contact with water, emit flammable gases (section 2.12)	1, 2, 3	
P232	Protect from moisture.	Substances and mixtures which, in contact with water, emit flammable gases (section 2.12)	1, 2, 3	
P233	Keep container tightly closed.	Flammable liquids (section 2.6)	1, 2, 3	– <i>if product is volatile so as to generate hazardous atmosphere.</i>
		Acute toxicity – inhalation (section 3.1)	1, 2, 3	
		Specific target organ toxicity – single exposure; respiratory tract irritation (section 3.8)	3	
		Specific target organ toxicity – single exposure; narcosis (section 3.8)	3	
P234	Keep only in original container.	Self-reactive substances and mixtures (section 2.8)	Types A, B, C, D, E, F	
		Organic peroxides (section 2.15)	Types A, B, C, D, E, F	
		Corrosive to metals (section 2.16)	1	

Code (1)	Prevention precautionary statements (2)	Hazard class (3)	Hazard category (4)	Conditions for use (5)
P235	Keep cool.	Flammable liquids (section 2.6)	1, 2, 3	
		Self-reactive substances and mixtures (Section 2.8)	Types A, B, C, D, E, F	
		Self-heating substances and mixtures (section 2.11)	1, 2	
		Organic peroxides (section 2.15)	Types A, B, C, D, E, F	
P240	Ground/bond container and receiving equipment.	Explosives (section 2.1)	Divisions 1.1, 1.2, 1.3, 1.4, 1.5	– <i>if the explosive is electrostatically sensitive.</i>
		Flammable liquids (section 2.6)	1, 2, 3	– <i>if electrostatically sensitive material is for reloading.</i> – <i>if product is volatile so as to generate hazardous atmosphere.</i>
		Flammable solids (section 2.7)	1, 2	– <i>if electrostatically sensitive material is for reloading.</i>

Code (1)	Prevention precautionary statements (2)	Hazard class (3)	Hazard category (4)	Conditions for use (5)
P241	Use explosion-proof electrical/ventilating/lighting/.../ equipment.	Flammable liquids (section 2.6)	1, 2, 3	... Manufacturer/supplier to specify other equipment.
		Flammable solids (section 2.7)	1, 2	... Manufacturer/supplier to specify other equipment. – <i>if dust clouds can occur.</i>
P242	Use only non-sparking tools.	Flammable liquids (section 2.6)	1, 2, 3	
P243	Take precautionary measures against static discharge.	Flammable liquids (section 2.6)	1, 2, 3	
P244	Keep reduction valves free from grease and oil.	Oxidising gases (section 2.4)	1	
P250	Do not subject to grinding/shock/.../friction.	Explosives (section 2.1)	Divisions 1.1, 1.2, 1.3, 1.4, 1.5	... Manufacturer/supplier to specify applicable rough handling.
P251	Pressurized container: Do not pierce or burn, even after use.	Flammable aerosols (section 2.3)	1, 2	

Code (1)	Prevention precautionary statements (2)	Hazard class (3)	Hazard category (4)	Conditions for use (5)
P260	Do not breathe dust/fume/gas/mist/vapours/spray.	Acute toxicity – inhalation (section 3.1)	1, 2	Manufacturer/supplier to specify applicable conditions.
		Specific target organ toxicity – single exposure (section 3.8)	1, 2	
		Specific target organ toxicity – repeated exposure (section 3.9)	1, 2	
		Skin corrosion (section 3.2)	1A, 1B, 1C	<ul style="list-style-type: none"> – <i>Specify do not breathe dusts or mists.</i> – <i>if inhalable particles of dusts or mists may occur during use.</i>
		Reproductive toxicity – effects on or via lactation (section 3.7)	Additional category	
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.	Acute toxicity – inhalation (section 3.1)	3, 4	Manufacturer/supplier to specify applicable conditions.
		Respiratory sensitisation (section 3.4)	1, 1A, 1B	
		Skin sensitisation (section 3.4)	1, 1A, 1B	
		Specific target organ toxicity – single exposure; respiratory tract irritation (section 3.8)	3	
		Specific target organ toxicity – single exposure; narcosis (section 3.8)	3	
P262	Do not get in eyes, on skin, or on clothing.	Acute toxicity – dermal (section 3.1)	1, 2	

Code	Prevention precautionary statements	Hazard class	Hazard category	Conditions for use
(1)	(2)	(3)	(4)	(5)
P263	Avoid contact during pregnancy/while nursing.	Reproductive toxicity – effects on or via lactation (section 3.7)	Additional category	
P264	Wash ... thoroughly after handling.	Acute toxicity – oral (section 3.1)	1, 2, 3, 4	... Manufacturer/s supplier to specify parts of the body to be washed after handling.
		Acute toxicity – dermal (section 3.1)	1, 2	
		Skin corrosion (section 3.2)	1A, 1B, 1C	
		Skin irritation (section 3.2)	2	
		Eye irritation (section 3.3)	2	
		Reproductive toxicity – effects on or via lactation (section 3.7)	Additional category	
		Specific target organ toxicity – single exposure (section 3.8)	1, 2	
Specific target organ toxicity – repeated exposure (section 3.9)	1			
P270	Do not eat, drink or smoke when using this product.	Acute toxicity – oral (section 3.1)	1, 2, 3, 4	
		Acute toxicity – dermal (section 3.1)	1, 2	
		Reproductive toxicity – effects on or via lactation (section 3.7)	Additional category	
		Specific target organ toxicity – single exposure (section 3.8)	1, 2	

Code	Prevention precautionary statements	Hazard class	Hazard category	Conditions for use
(1)	(2)	(3)	(4)	(5)
		Specific target organ toxicity – repeated exposure (section 3.9)	1	

Code	Prevention precautionary statements	Hazard class	Hazard category	Conditions for use
(1)	(2)	(3)	(4)	(5)
P271	Use only outdoors or in a well-ventilated area.	Acute toxicity – inhalation (section 3.1)	1, 2, 3, 4	
		Specific target organ toxicity – single exposure; respiratory tract irritation (section 3.8)	3	
		Specific target organ toxicity – single exposure; narcosis (section 3.8)	3	
P272	Contaminated work clothing should not be allowed out of the workplace.	Skin sensitisation (section 3.4)	1, 1A, 1B	
P273	Avoid release to the environment.	Hazardous to the aquatic environment – acute aquatic hazard (section 4.1)	1	– <i>if this is not the intended use.</i>
		Hazardous to the aquatic environment – long-term aquatic hazard (section 4.1)	1, 2, 3, 4	

Code (1)	Prevention precautionary statements (2)	Hazard class (3)	Hazard category (4)	Conditions for use (5)
P280	Wear protective gloves/protective clothing/eye protection/face protection.	Explosives (section 2.1)	Divisions 1.1, 1.2, 1.3, 1.4, 1.5	Manufacturer/supplier to specify type of equipment. – <i>Specify face protection.</i>
		Flammable liquids (section 2.6)	1, 2, 3	Manufacturer/supplier to specify type of equipment.
		Flammable solids (section 2.7)	1, 2	– <i>Specify protective gloves and eye/face protection.</i>
		Self-reactive substances and mixtures (section 2.8)	Types A, B, C, D, E, F	
		Pyrophoric liquids (section 2.9)	1	
		Pyrophoric solids (section 2.10)	1	
		Self-heating substances and mixtures (section 2.11)	1, 2	
		Substances and mixtures which, in contact with water, emit flammable gases (section 2.12)	1, 2, 3	
		Oxidising liquids (section 2.13)	1, 2, 3	
		Oxidising solids (section 2.14)	1, 2, 3	
		Organic peroxides (section 2.15)	Types A, B, C, D, E, F	
		Acute toxicity – dermal (section 3.1)	1, 2, 3, 4	Manufacturer/supplier to specify type of equipment. – <i>Specify protective gloves/clothing.</i>

Code	Prevention precautionary statements	Hazard class	Hazard category	Conditions for use
(1)	(2)	(3)	(4)	(5)
		Skin corrosion (section 3.2)	1A, 1B, 1C	Manufacturer/supplier to specify type of equipment. – <i>Specify protective gloves/clothing and eye/face protection.</i>
		Skin irritation (section 3.2)	2	Manufacturer/supplier to specify type of equipment. – <i>Specify protective gloves.</i>
		Skin sensitisation (section 3.4)	1, 1A, 1B	
		Severe eye damage/ (section 3.3)	1	Manufacturer/supplier to specify type of equipment. – <i>Specify eye/face protection.</i>
		Eye irritation (section 3.3)	2	
P281	Use personal protective equipment as required.	Explosives (section 2.1)	Unstable explosive	
		Germ cell mutagenicity (section 3.5)	1A, 1B, 2	
		Carcinogenicity (section 3.6)	1A, 1B, 2	
		Reproductive toxicity (section 3.7)	1A, 1B, 2	

Code (1)	Prevention precautionary statements (2)	Hazard class (3)	Hazard category (4)	Conditions for use (5)
P282	Wear cold insulating gloves/face shield/eye protection.	Gases under pressure (section 2.5)	Refrigerated liquefied gas	
P283	Wear fire/ flame resistant/retardant clothing.	Oxidising liquids (section 2.13)	1	
		Oxidising solids (section 2.14)	1	
P284	Wear respiratory protection.	Acute toxicity – inhalation (section 3.1)	1, 2	Manufacturer/supplier to specify equipment.
P285	In case of inadequate ventilation wear respiratory protection.	Respiratory sensitisation (section 3.4)	1,1A, 1B	Manufacturer/supplier to specify equipment.
P231 + P232	Handle under inert gas. Protect from moisture.	Substances and mixtures which, in contact with water, emit flammable gases (section 2.12)	1, 2, 3	
P235 + P410	Keep cool. Protect from sunlight.	Self-heating substances and mixtures (section 2.11)	1, 2	

Table 6.3
Precautionary statements – Response

Code	Response precautionary statements	Hazard class	Hazard category	Conditions for use
(1)	(2)	(3)	(4)	(5)
P301	IF SWALLOWED:	Acute toxicity – oral (section 3.1)	1, 2, 3, 4	
		Skin corrosion (section 3.2)	1A, 1B, 1C	
		Aspiration Hazard (section 3.10)	1	
P302	IF ON SKIN:	Pyrophoric liquids (section 2.9)	1	
		Acute toxicity – dermal (section 3.1)	1, 2, 3, 4	
		Skin irritation (section 3.2)	2	
		Skin sensitisation (section 3.4)	1, 1A, 1B	
P303	IF ON SKIN (or hair):	Flammable liquids (section 2.6)	1, 2, 3	
		Skin corrosion (section 3.2)	1A, 1B, 1C	
P304	IF INHALED:	Acute toxicity – inhalation (section 3.1)	1, 2, 3, 4	
		Skin corrosion (section 3.2)	1A, 1B, 1C	
		Respiratory sensitisation (section 3.4)	1, 1A, 1B	
		Specific target organ toxicity – single exposure; respiratory tract irritation (section 3.8)	3	
		Specific target organ toxicity – single exposure; narcosis (section 3.8)	3	

Code	Response precautionary statements	Hazard class	Hazard category	Conditions for use
(1)	(2)	(3)	(4)	(5)
P305	IF IN EYES:	Skin corrosion (section 3.2)	1A, 1B, 1C	
		Serious eye damage/eye irritation (section 3.3)	1	
		Eye irritation (section 3.3)	2	
P306	IF ON CLOTHING:	Oxidising liquids (section 2.13)	1	
		Oxidising solids (section 2.14)	1	
P307	IF exposed:	Specific target organ toxicity – single exposure (section 3.8)	1	
P308	IF exposed or concerned:	Germ cell mutagenicity (section 3.5)	1A, 1B, 2	
		Carcinogenicity (section 3.6)	1A, 1B, 2	
		Reproductive toxicity (section 3.7)	1A, 1B, 2	
		Reproductive toxicity – effects on or via lactation (section 3.7)	Additional category	
P309	IF exposed or if you feel unwell:	Specific target organ toxicity – single exposure (section 3.8)	2	
P310	Immediately call a POISON CENTER or doctor/physician.	Acute toxicity – oral (section 3.1)	1, 2, 3	
		Acute toxicity – dermal (section 3.1)	1, 2	
		Acute toxicity – inhalation (section 3.1)	1, 2	
		Skin corrosion (section 3.2)	1A, 1B, 1C	
		Serious eye damage/eye irritation (section 3.3)	1	
		Aspiration hazard (section 3.10)	1	

Code	Response precautionary statements	Hazard class	Hazard category	Conditions for use
(1)	(2)	(3)	(4)	(5)
P311	Call a POISON CENTER or doctor/physician.	Acute toxicity – inhalation (section 3.1)	3	
		Respiratory sensitisation (section 3.4)	1, 1A, 1B	
		Specific target organ toxicity – single exposure (section 3.8)	1, 2	
P312	Call a POISON CENTER or doctor/physician if you feel unwell.	Acute toxicity – oral (section 3.1)	4	
		Acute toxicity – dermal (section 3.1)	3, 4	
		Acute toxicity – inhalation (section 3.1)	4	
		Specific target organ toxicity – single exposure; respiratory tract irritation (section 3.8)	3	
		Specific target organ toxicity – single exposure; narcosis (section 3.8)	3	
P313	Get medical advice/attention.	Skin irritation (section 3.2)	2, 3	
		Eye irritation (section 3.3)	2	
		Skin sensitisation (section 3.4)	1, 1A, 1B	
		Germ cell mutagenicity (section 3.5)	1A, 1B, 2	
		Carcinogenicity (section 3.6)	1A, 1B, 2	
		Reproductive toxicity (section 3.7)	1A, 1B, 2	
		Reproductive toxicity – effects on or via lactation (section 3.7)	Additional category	

Code	Response precautionary statements	Hazard class	Hazard category	Conditions for use
(1)	(2)	(3)	(4)	(5)
P314	Get medical advice/attention if you feel unwell.	Specific target organ toxicity – repeated exposure (section 3.9)	1, 2	
P315	Get immediate medical advice/attention.	Gases under pressure (section 2.5)	Refrigerated liquefied gas	
P320	Specific treatment is urgent (see ... on this label).	Acute toxicity – inhalation (section 3.1)	1, 2	<ul style="list-style-type: none"> ... Reference to supplemental first aid instruction. – <i>if immediate administration of antidote is required.</i>

Code	Response precautionary statements	Hazard class	Hazard category	Conditions for use
(1)	(2)	(3)	(4)	(5)
P321	Specific treatment (see ... on this label).	Acute toxicity – oral (section 3.1)	1, 2, 3	... Reference to supplemental first aid instruction. – <i>if immediate administration of antidote is required.</i>
		Acute toxicity – inhalation (section 3.1)	3	... Reference to supplemental first aid instruction. – <i>if immediate specific measures are required.</i>
		Specific target organ toxicity – single exposure (section 3.8)	1	... Reference to supplemental first aid instruction. – <i>if immediate measures are required.</i>
		Skin sensitisation (section 3.4)	1, 1A,1B	... Reference to supplemental first aid instruction. – <i>manufacturer/supplier may specify a cleansing agent if appropriate.</i>
		Skin corrosion (section 3.2)	1A, 1B, 1C	
		Skin irritation (section 3.2)	2	

Code	Response precautionary statements	Hazard class	Hazard category	Conditions for use
(1)	(2)	(3)	(4)	(5)
P322	Specific measures (see ... on this label).	Acute toxicity – dermal (section 3.1)	1, 2	... Reference to supplemental first aid instruction. – <i>if immediate measures such as specific cleansing agent is advised.</i>
		Acute toxicity – dermal (section 3.1)	3, 4	... Reference to supplemental first aid instruction. – <i>if measures such as specific cleansing agent is advised.</i>
P330	Rinse mouth.	Acute toxicity – oral (section 3.1)	1, 2, 3, 4	
		Skin corrosion (section 3.2)	1A, 1B, 1C	
P331	Do NOT induce vomiting.	Skin corrosion (section 3.2)	1A, 1B, 1C	
		Aspiration hazard (section 3.10)	1	
P332	If skin irritation occurs:	Skin irritation (section 3.2)	2, 3	
P333	If skin irritation or rash occurs:	Skin sensitisation (section 3.4)	1, 1A, 1B	
P334	Immerse in cool water/wrap in wet bandages.	Pyrophoric liquids (section 2.9)	1	
		Pyrophoric solids (section 2.10)	1	
		Substances and mixtures which, in contact with water, emit flammable gases (section 2.12)	1, 2	

Code	Response precautionary statements	Hazard class	Hazard category	Conditions for use
(1)	(2)	(3)	(4)	(5)
P335	Brush off loose particles from skin.	Pyrophoric solids (section 2.10)	1	
		Substances and mixtures which, in contact with water, emit flammable gases (section 2.12)	1, 2	
P336	Thaw frosted parts with lukewarm water. Do not rub affected area.	Gases under pressure (section 2.5)	Refrigerated liquefied gas	
P337	If eye irritation persists:	Eye irritation (section 3.3)	2	
P338	Remove contact lenses, if present and easy to do. Continue rinsing.	Skin corrosion (section 3.2)	1A, 1B, 1C	
		Serious eye damage/eye irritation (section 3.3)	1	
		Eye irritation (section 3.3)	2	
P340	Remove victim to fresh air and keep at rest in a position comfortable for breathing.	Acute toxicity – inhalation (section 3.1)	1, 2, 3, 4	
		Skin corrosion (section 3.2)	1A, 1B, 1C	
		Specific target organ toxicity – single exposure; respiratory tract irritation (section 3.8)	3	
		Specific target organ toxicity – single exposure; narcosis (section 3.8)	3	

Code	Response precautionary statements	Hazard class	Hazard category	Conditions for use
(1)	(2)	(3)	(4)	(5)
P341	If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.	Respiratory sensitisation (section 3.4)	1, 1A, 1B	
P342	If experiencing respiratory symptoms:	Respiratory sensitisation (section 3.4)	1, 1A, 1B	
P350	Gently wash with plenty of soap and water.	Acute toxicity – dermal (section 3.1)	1, 2	
P351	Rinse cautiously with water for several minutes.	Skin corrosion (section 3.2)	1A, 1B, 1C	
		Serious eye damage/eye irritation (section 3.3)	1	
		Eye irritation (section 3.3)	2	
P352	Wash with plenty of soap and water.	Acute toxicity – dermal (section 3.1)	3, 4	
		Skin irritation (section 3.2)	2	
		Skin sensitisation (section 3.4)	1, 1A, 1B	
P353	Rinse skin with water/shower.	Flammable liquids (section 2.6)	1, 2, 3	
		Skin corrosion (section 3.2)	1A, 1B, 1C	

Code	Response precautionary statements	Hazard class	Hazard category	Conditions for use
(1)	(2)	(3)	(4)	(5)
P360	Rinse immediately contaminated clothing and skin with plenty of water before removing clothes.	Oxidising liquids (section 2.13)	1	
		Oxidising solids (section 2.14)	1	
P361	Remove/Take off immediately all contaminated clothing.	Flammable liquids (section 2.6)	1, 2, 3	
		Acute toxicity – dermal (section 3.1)	1, 2, 3	
		Skin corrosion (section 3.2)	1A, 1B, 1C	
P362	Take off contaminated clothing and wash before reuse.	Skin irritation (section 3.2)	2	
P363	Wash contaminated clothing before reuse.	Acute toxicity – dermal (section 3.1)	1, 2, 3, 4	
		Skin corrosion (section 3.2)	1A, 1B, 1C	
		Skin sensitisation (section 3.4)	1, 1A, 1B	
P370	In case of fire:	Explosives (section 2.1)	Divisions 1.1, 1.2, 1.3, 1.4, 1.5	
		Oxidising gases (section 2.4)	1	
		Flammable liquids (section 2.6)	1, 2, 3	
		Flammable solids (section 2.7)	1, 2	
		Self-reactive substances and mixtures (section 2.8)	Types A, B, C, D, E, F	

Code	Response precautionary statements	Hazard class	Hazard category	Conditions for use
(1)	(2)	(3)	(4)	(5)
P370 <i>(cont'd)</i>		Pyrophoric liquids (section 2.9)	1	
		Pyrophoric solids (section 2.10)	1	
		Substances and mixtures which, in contact with water, emit flammable gases (section 2.12)	1, 2, 3	
		Oxidising liquids (section 2.13)	1, 2, 3	
		Oxidising solids (section 2.14)	1, 2, 3	
P371	In case of major fire and large quantities:	Oxidising liquids (section 2.13)	1	
		Oxidising solids (section 2.14)	1	
P372	Explosion risk in case of fire.	Explosives (section 2.1)	Unstable explosives and Divisions 1.1, 1.2, 1.3, 1.4, 1.5	– <i>except if explosives are 1.4S AMMUNITION AND COMPONENTS THEREOF.</i>
P373	DO NOT fight fire when fire reaches explosives.	Explosives (section 2.1)	Unstable explosives and Divisions 1.1, 1.2, 1.3, 1.4, 1.5	
P374	Fight fire with normal precautions from a reasonable distance.	Explosives (section 2.1)	Division 1.4	– <i>if explosives are 1.4S AMMUNITION AND COMPONENTS THEREOF.</i>

Code (1)	Response precautionary statements (2)	Hazard class (3)	Hazard category (4)	Conditions for use (5)
P375	Fight fire remotely due to the risk of explosion.	Self-reactive substances and mixtures (section 2.8)	Types A, B	
		Oxidising liquids (section 2.13)	1	
		Oxidising solids (section 2.14)	1	
P376	Stop leak if safe to do so.	Oxidising gases (section 2.4)	1	
P377	Leaking gas fire: Do not extinguish, unless leak can be stopped safely.	Flammable gases (section 2.2)	1, 2	
P378	Use ... for extinction.	Flammable liquids (section 2.6)	1, 2, 3	<p>... Manufacturer/supplier to specify appropriate media if water increases risk.</p>
		Flammable solids (section 2.7)	1, 2	
		Self-reactive substances and mixtures (section 2.8)	Types A, B, C, D, E, F	
		Pyrophoric liquids (section 2.9)	1	
		Pyrophoric solids (section 2.10)	1	
		Substances and mixtures which, in contact with water, emit flammable gases (section 2.12)	1, 2, 3	
		Oxidising liquids (section 2.13)	1, 2, 3	
		Oxidising solids (section 2.14)	1, 2, 3	

Code	Response precautionary statements	Hazard class	Hazard category	Conditions for use
(1)	(2)	(3)	(4)	(5)
P380	Evacuate area.	Explosives (section 2.1)	Unstable explosives	
		Explosives (section 2.1)	Divisions 1.1, 1.2, 1.3, 1.4, 1.5	
		Self-reactive substances and mixtures (section 2.8)	Types A, B	
		Oxidising liquids (section 2.13)	1	
		Oxidising solids (section 2.14)	1	
P381	Eliminate all ignition sources if safe to do so.	Flammable gases (section 2.2)	1, 2	
P390	Absorb spillage to prevent material damage.	Corrosive to metals (section 2.16)	1	
P391	Collect spillage.	Hazardous to the aquatic environment – acute aquatic hazard (section 4.1)	1	
		Hazardous to the aquatic environment – long-term aquatic hazard (section 4.1)	1, 2	
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.	Acute toxicity – oral (section 3.1)	1, 2, 3	
		Aspiration hazard (section 3.10)	1	
P301 + P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.	Acute toxicity – oral (section 3.1)	4	
P301 + P330 + P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.	Skin corrosion (section 3.2)	1A, 1B, 1C	
P302 + P334	IF ON SKIN: Immerse in cool water/wrap in wet bandages.	Pyrophoric liquids (section 2.9)	1	

Code	Response precautionary statements	Hazard class	Hazard category	Conditions for use
(1)	(2)	(3)	(4)	(5)
P302 + P350	IF ON SKIN: Gently wash with plenty of soap and water.	Acute toxicity – dermal (section 3.1)	1, 2	
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.	Acute toxicity – dermal (section 3.1)	3, 4	
		Skin irritation (section 3.2)	2	
		Skin sensitisation (section 3.4)	1, 1A, 1B	
P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.	Flammable liquids (section 2.6)	1, 2, 3	
		Skin corrosion (section 3.2)	1A, 1B, 1C	
P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.	Acute toxicity – inhalation (section 3.1)	1, 2, 3, 4	
		Skin corrosion (section 3.2)	1A, 1B, 1C	
		Specific target organ toxicity – single exposure; respiratory tract irritation (section 3.8)	3	
		Specific target organ toxicity – single exposure; narcosis (section 3.8)	3	
P304 + P341	IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.	Respiratory sensitisation (section 3.4)	1, 1A, 1B	
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.	Skin corrosion (section 3.2)	1A, 1B, 1C	
		Serious eye damage/eye irritation (section 3.3)	1	
		Eye irritation (section 3.3)	2	

Code	Response precautionary statements	Hazard class	Hazard category	Conditions for use
(1)	(2)	(3)	(4)	(5)
P306 + P360	IF ON CLOTHING: Rinse immediately contaminated clothing and skin with plenty of water before removing clothes.	Oxidising liquids (section 2.13)	1	
		Oxidising solids (section 2.14)	1	
P307 + P311	IF exposed: Call a POISON CENTER or doctor/physician.	Specific target organ toxicity – single exposure (section 3.8)	1	
P308 + P313	IF exposed or concerned: Get medical advice/ attention.	Germ cell mutagenicity (section 3.5)	1A, 1B, 2	
		Carcinogenicity (section 3.6)	1A, 1B, 2	
		Reproductive toxicity (section 3.7)	1A, 1B, 2	
		Reproductive toxicity – effects on or via lactation (section 3.7)	Additional category	
P309 + P311	IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.	Specific target organ toxicity – single exposure (section 3.8)	2	
P332 + P313	If skin irritation occurs: Get medical advice/ attention.	Skin irritation (section 3.2)	2	
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.	Skin sensitisation (section 3.4)	1, 1A, 1B	

Code (1)	Response precautionary statements (2)	Hazard class (3)	Hazard category (4)	Conditions for use (5)
P335 + P334	Brush off loose particles from skin. Immerse in cool water/wrap in wet bandages.	Pyrophoric solids (section 2.10)	1	
		Substances and mixtures which, in contact with water, emit flammable gases (section 2.12)	1, 2	
P337 + P313	If eye irritation persists: Get medical advice/attention.	Eye irritation (section 3.3)	2	
P342 + P311	If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.	Respiratory sensitisation (section 3.4)	1, 1A, 1B	
P370 + P376	In case of fire: Stop leak if safe to do so.	Oxidizing gases (section 2.4)	1	
P370 + P378	In case of fire: Use ... for extinction.	Flammable liquids (section 2.6)	1, 2, 3	... Manufacturer/supplier to specify appropriate media. – <i>if water increases risk.</i>
		Flammable solids (section 2.7)	1, 2	
		Self-reactive substances and mixtures (section 2.8)	Types A, B, C, D, E, F	
		Pyrophoric liquids (section 2.9)	1	
		Pyrophoric solids (section 2.10)	1	
		Substances and mixtures which, in contact with water, emit flammable gases (section 2.12)	1, 2, 3	
		Oxidising liquids (section 2.13)	1, 2, 3	
		Oxidising solids (section 2.14)	1, 2, 3	

Code	Response precautionary statements	Hazard class	Hazard category	Conditions for use
(1)	(2)	(3)	(4)	(5)
P370 + P380	In case of fire: Evacuate area.	Explosives (section 2.1)	Divisions 1.1, 1.2, 1.3, 1.4, 1.5	
P370 + P380 + P375	In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion.	Self-reactive substances and mixtures (section 2.8)	Types A, B	
P371 + P380 + P375	In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.	Oxidising liquids (section 2.13)	1	
		Oxidising solids (section 2.14)	1	

Table 6.4
Precautionary statements – Storage

Code	Storage precautionary statements	Hazard class	Hazard category	Conditions for use
(1)	(2)	(3)	(4)	(5)
P401	Store ...	Explosives (section 2.1)	Unstable explosives and Divisions 1.1, 1.2, 1.3, 1.4, 1.5	... in accordance with local/regional/national/international regulations (to be specified).
P402	Store in a dry place.	Substances and mixtures which, in contact with water, emit flammable gases (section 2.12)	1, 2, 3	
P403	Store in a well-ventilated place.	Flammable gases (section 2.2)	1, 2	
		Oxidising gases (section 2.4)	1	
		Gases under pressure (section 2.5)	Compressed gas	
			Liquefied gas	
			Refrigerated Liquefied gas	
			Dissolved gas	
		Flammable liquids (section 2.6)	1, 2, 3	
Self-reactive substances and mixtures (section 2.8)	Types A, B, C, D, E, F			

Code	Storage precautionary statements	Hazard class	Hazard category	Conditions for use
(1)	(2)	(3)	(4)	(5)
P403 (cont'd)		Acute toxicity – inhalation (section 3.1)	1, 2, 3	– <i>if product is volatile so as to generate hazardous atmosphere.</i>
		Specific target organ toxicity – single exposure; respiratory tract irritation (section 3.8)	3	
		Specific target organ toxicity – single exposure; narcosis (section 3.8)	3	
P404	Store in a closed container.	Substances and mixtures which, in contact with water, emit flammable gases (section 2.12)	1, 2, 3	

Code	Storage precautionary statements	Hazard class	Hazard category	Conditions for use
(1)	(2)	(3)	(4)	(5)
P405	Store locked up.	Acute toxicity – oral (section 3.1)	1, 2, 3	
		Acute toxicity – dermal (section 3.1)	1, 2, 3	
		Acute toxicity – inhalation (section 3.1)	1, 2, 3	
		Skin corrosion (section 3.2)	1A, 1B, 1C	
		Germ cell mutagenicity (section 3.5)	1A, 1B, 2	
		Carcinogenicity (section 3.6)	1A, 1B, 2	
		Reproductive toxicity (section 3.7)	1A, 1B, 2	
		Specific target organ toxicity – single exposure (section 3.8)	1, 2	
		Specific target organ toxicity – single exposure; respiratory tract irritation (section 3.8)	3	
		Specific target organ toxicity – single exposure; narcosis (section 3.8)	3	
		Aspiration hazard (section 3.10)	1	
P406	Store in corrosive resistant/... container with a resistant inner liner.	Corrosive to metals (section 2.16)	1	... Manufacturer/supplier to specify other compatible materials.

Code	Storage precautionary statements	Hazard class	Hazard category	Conditions for use
(1)	(2)	(3)	(4)	(5)
P407	Maintain air gap between stacks/pallets.	Self-heating substances and mixtures (section 2.11)	1, 2	
P410	Protect from sunlight.	Flammable aerosols (section 2.3)	1, 2	
		Gases under pressure (section 2.5)	Compressed gas	
			Liquefied gas	
			Dissolved gas	
		Self-heating substances and mixtures (section 2.11)	1, 2	
Organic peroxides (section 2.15)	Types A, B, C, D, E, F			
P411	Store at temperatures not exceeding ...°C/...°F.	Self-reactive substances and mixtures (section 2.8)	Types A, B, C, D, E, F	... Manufacturer/supplier to specify temperature
		Organic peroxides (section 2.15)	Types A, B, C, D, E, F	
P412	Do not expose to temperatures exceeding 50 °C/ 122 °F.	Flammable aerosols (section 2.3)	1, 2	

Code	Storage precautionary statements	Hazard class	Hazard category	Conditions for use
(1)	(2)	(3)	(4)	(5)
P413	Store bulk masses greater than ... kg/...lbs at temperatures not exceeding ...°C/...°F.	Self-heating substances and mixtures (section 2.11)	1, 2	*** Manufacturer/supplier to specify mass and temperature.
P420	Store away from other materials.	Self-reactive substances and mixtures (section 2.8)	Types A, B, C, D, E, F	
		Self-heating substances and mixtures (section 2.11)	1, 2	
		Organic peroxides (section 2.15)	Types A, B, C, D, E, F	
P422	Store contents under ...	Pyrophoric liquids (section 2.9)	1	*** Manufacturer/supplier to specify appropriate liquid or inert gas.
		Pyrophoric solids (section 2.10)	1	

Code (1)	Storage precautionary statements (2)	Hazard class (3)	Hazard category (4)	Conditions for use (5)
P402 + P404	Store in a dry place. Store in a closed container.	Substances and mixtures which, in contact with water, emit flammable gases (section 2.12)	1, 2, 3	
P403 + P233	Store in a well- ventilated place. Keep container tightly closed.	Acute toxicity – inhalation (section 3.1)	1, 2, 3	– <i>if product is volatile so as to generate hazardous atmosphere.</i>
		Specific target organ toxicity – single exposure; respiratory tract irritation (section 3.8)	3	
		Specific target organ toxicity – single exposure; narcosis (section 3.8)	3	
P403 + P235	Store in a well- ventilated place. Keep cool.	Flammable liquids (section 2.6)	1, 2, 3	
		Self-reactive substances and mixtures (section 2.8)	Types A, B, C, D, E, F	

Code (1)	Storage precautionary statements (2)	Hazard class (3)	Hazard category (4)	Conditions for use (5)
P410 + P403	Protect from sunlight. Store in a well-ventilated place.	Gases under pressure (section 2.5)	Compressed gas	
			Liquefied gas	
			Dissolved gas	
P410 + P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122°F.	Flammable aerosols (section 2.3)	1, 2	
P411 + P235	Store at temperatures not exceeding ...°C/...°F. Keep cool.	Organic peroxides (section 2.15)	Types A, B, C, D, E, F	*** Manufacturer/supplier to specify temperature.

Table 6.5
Precautionary statements – Disposal

Code (1)	Disposal precautionary statements (2)	Hazard class (3)	Hazard category (4)	Conditions for use (5)
P501	Dispose of contents/container to ...	Explosives (section 2.1)	Unstable explosives and Divisions 1.1, 1.2, 1.3, 1.4, 1.5	... in accordance with local/regional/national/international regulation (to be specified).
		Flammable liquids (section 2.6)	1, 2, 3	
		Self-reactive substances and mixtures (section 2.8)	Types A, B, C, D, E, F	
		Substances and mixtures which, in contact with water, emit flammable gases (section 2.12)	1, 2, 3	
		Oxidising liquids (section 2.13)	1, 2, 3	
		Oxidising solids (section 2.14)	1, 2, 3	
		Organic peroxides (section 2.15)	Types A, B, C, D, E, F	
		Acute toxicity – oral (section 3.1)	1, 2, 3, 4	
		Acute toxicity – dermal (section 3.1)	1, 2, 3, 4	
		Acute toxicity – inhalation (section 3.1)	1, 2	
	Skin corrosion (section 3.2)	1A, 1B, 1C		

Code (1)	Disposal precautionary statements (2)	Hazard class (3)	Hazard category (4)	Conditions for use (5)
<i>P501</i> <i>(cont'd)</i>		Respiratory sensitisation (section 3.4)	1, 1A, 1B	
		Skin sensitisation (section 3.4)	1, 1A, 1B	
		Germ cell mutagenicity (section 3.5)	1A, 1B, 2	
		Carcinogenicity (section 3.6)	1A, 1B, 2	
		Reproductive toxicity (section 3.7)	1A, 1B, 2	
		Specific target organ toxicity – single exposure (section 3.8)	1, 2	
		Specific target organ toxicity – single exposure; respiratory tract irritation (section 3.8)	3	
		Specific target organ toxicity – single exposure; narcosis (section 3.8)	3	
		Specific target organ toxicity – repeated exposure (section 3.9)	1, 2	
		Aspiration hazard (section 3.10)	1	
		Hazardous to the aquatic environment – acute aquatic hazard(section 4.1)	1	
		Hazardous to the aquatic environment – chronic aquatic hazard (section 4.1)	1, 2, 3, 4	
		Hazardous to the ozone layer (section 5.1)	1	
		P502	Refer to manufacturer/supplier for information on recovery/recycling		Hazardous to the ozone layer (section 5.1)	1

2. PART 2: PRECAUTIONARY STATEMENTS

The precautionary statements shall be taken from this part of Annex IV and selected in accordance with Part 1.

Table 1.1
Precautionary statements – General

P101	Language	
	BG	••• •• ••••, •••••••••••• ••••••••••••
	ES	Si se necesita consejo médico, tener a mano el envase o la etiqueta.
	CS	Je-li nutná léka•ská pomoc, m•jte po ruce obal nebo štítek výrobku.
	DA	Hvis der er brug for lægehjælp, medbring da beholderen eller etiketten.
	DE	Ist ärztlicher Rat erforderlich, Verpackung oder Kennzeichnungsetikett bereithalten.
	ET	Arsti poole pöördudes võtta kaasa toote pakend või etikett.
	EL	
	EN	If medical advice is needed, have product container or label at hand.
	FR	En cas de consultation d'un médecin, garder à disposition le récipient ou l'étiquette.
	GA	Más gá comhairle liachta, bíodh coimeádán nó lipéad an táirge ina aice láimhe.
	IT	In caso di consultazione di un medico, tenere a disposizione il contenitore o l'etichetta del prodotto.
	LV	Medic•niska padoma nepieciešam•bas gad•jum• attiec•g• inform•cija ir nor•d•ta uz iepakojuma vai eti•etes.
	LT	Jei reikalinga gydytojo konsultacija, su savimi tur•kite produkto talpykl• ar jo etiket•.
	HU	Orvosi tanácsadás esetén tartsa kéznél a termék edényét vagy címkéjét.
	MT	Jekk ikun me•tie• parir mediku, ara li jkollok il-kontenitur jew it-tikketta tal-prodott fil-qrib.
	NL	Bij het inwinnen van medisch advies, de verpakking of het etiket ter beschikking houden.
	PL	W razie konieczno•ci zasi•gni•cia porady lekarza nale•y pokaza• pojemnik lub etykiet•.

P101	Language	
	PT	Se for necessário consultar um médico, mostre-lhe a embalagem ou o rótulo.
	RO	Dacă este necesară consultarea medicului, prezentați la îndemână recipientul sau eticheta produsului.
	SK	Ak je potrebná lekárska pomoc, majte k dispozícii obal alebo etiketu výrobku.
	SL	Če je potreben zdravniški nasvet, mora biti na voljo posoda ali etiketa proizvoda.
	FI	Jos tarvitaan lääkinnällistä apua, näytä pakkaus tai varoitusetiketti.
	SV	Ha förpackningen eller etiketten till hands om du måste söka läkarvård.

P102	Language	
	BG	•••••
	ES	Mantener fuera del alcance de los niños.
	CS	Uchovávejte mimo dosah dětí.
	DA	Opbevares utilgængeligt for børn.
	DE	Darf nicht in die Hände von Kindern gelangen.
	ET	Hoida lastele kättesaamatus kohas.
	EL	
	EN	Keep out of reach of children.
	FR	Tenir hors de portée des enfants.
	GA	Coimeád as aimsiú leanaí.
	IT	Tenere fuori dalla portata dei bambini.
	LV	Sargot no bērniem.
	LT	Laikyti vaikams neprieinamoje vietoje.
	HU	Gyermekektől elzárva tartandó.
	MT	•ommu 'l bogħod minn fejn jistgħu jil•quh it-tfal.
	NL	Buiten het bereik van kinderen houden.
	PL	Chronić przed dziećmi.
	PT	Manter fora do alcance das crianças.
	RO	A nu se lăsa la îndemâna copiilor.
	SK	Uchovávať mimo dosahu detí.
	SL	Hraniti zunaj dosega otrok.
	FI	Säilytä lasten ulottumattomissa.
	SV	Förvaras oåtkomligt för barn.

P103	Language	
	BG	
	ES	Leer la etiqueta antes del uso.
	CS	Před použitím si přečtěte údaje na štítku.
	DA	Læs etiketten før brug.
	DE	Vor Gebrauch Kennzeichnungsetikett lesen.
	ET	Enne kasutamist tutvuda etiketil oleva infoga.
	EL	
	EN	Read label before use.
	FR	Lire l'étiquette avant utilisation.
	GA	Léigh an lipéad roimh úsáid.
	IT	Leggere l'etichetta prima dell'uso.
	LV	Pirms izmantošanas izlasiet etiķi.
	LT	Prieš naudojimą perskaityti etiketę.
	HU	Használat előtt olvassa el a címkén közölt információkat.
	MT	Aqra t-tikketta qabel l-użu.
	NL	Alvorens te gebruiken, het etiket lezen.
	PL	Przed użyciem przeczytaj etykietę.
	PT	Ler o rótulo antes da utilização.
	RO	Citiți eticheta înainte de utilizare.
	SK	Pred použitím si prečítajte etiketu.
	SL	Pred uporabo preberite etiketo.
	FI	Lue merkinnät ennen käyttöä.
	SV	Läs etiketten före användning.

**Table 1.2
Precautionary statements – Prevention**

P201	Language	
	BG	• • • • • • • • • • •
	ES	Pedir instrucciones especiales antes del uso.
	CS	Před použitím si obstarajte speciální instrukce.
	DA	Indhent særlige anvisninger før brug.
	DE	Vor Gebrauch besondere Anweisungen einholen.
	ET	Enne kasutamist tutvuda erijuhistega.
	EL	
	EN	Obtain special instructions before use.
	FR	Se procurer les instructions avant utilisation.
	GA	Faigh treoracha speisialta roimh úsáid.
	IT	Procurarsi istruzioni specifiche prima dell'uso.
	LV	Pirms lietošanas saņem speciālu instrukciju.
	LT	Prieš naudojimą gauti specialias instrukcijas.
	HU	Használat előtt ismerje meg az anyagra vonatkozó különleges utasításokat.
	MT	Ikseb struzzjonijiet speċjali qabel l-użu.
	NL	Alvorens te gebruiken de speciale aanwijzingen raadplegen.
	PL	Przed użyciem zapoznać się ze specjalnymi środkami ostrożności.
	PT	Pedir instruções específicas antes da utilização.
	RO	Procurăi instrucțiuni speciale înainte de utilizare.
	SK	Pred použitím sa oboznámte s osobitnými pokynmi.
	SL	Pred uporabo pridobiti posebna navodila.
	FI	Lue erityisohjeet ennen käyttöä.
	SV	Inhämta särskilda instruktioner före användning.

P202	Language	
	BG	• • • • • • • • • • •
	ES	No manipular la sustancia antes de haber leído y comprendido todas las instrucciones de seguridad.
	CS	Nepoužívejte, dokud jste si nepřečetli všechny bezpečnostní pokyny a neporozuměli jim.
	DA	Anvend ikke produktet, før alle advarsler er læst og forstået.

P202	Language	
	DE	Vor Gebrauch alle Sicherheitshinweise lesen und verstehen.
	ET	Mitte käidelda enne ohutusnõuetega tutvumist ja nendest arusaamist.
	EL	...
	EN	Do not handle until all safety precautions have been read and understood.
	FR	Ne pas manipuler avant d'avoir lu et compris toutes les précautions de sécurité.
	GA	Ná láimhsigh go dtí go léifear agus go dtuigfear gach ráiteas réamhchúraim sábháilteachta.
	IT	Non manipolare prima di avere letto e compreso tutte le avvertenze.
	LV	Neizmantot pirms nav izlas•ti un saprasti visi apz•m•jumi.
	LT	Nenaudoti, jeigu neperskaityti ar nesuprasti visi saugos •sp•jimai.
	HU	Ne használja addig, amíg az összes biztonsági óvintézkedést el nem olvasta és meg nem értette.
	MT	Tmissux qabel ma tkun qrajt u fhimt l-istruzzjonijiet kollha ta' prekawzjoni.
	NL	Pas gebruiken nadat u alle veiligheidsvoorschriften gelezen en begrepen heeft
	PL	Nie u•ywa• przed zapoznaniem si• i zrozumieniem wszystkich •rodków bezpiecze•stwa.
	PT	Não manuseie o produto antes de ter lido e percebido todas as precauções de segurança.
	RO	A nu se manipula decât dup• ce au fost citite •i în•elese toate m•surile de securitate.
	SK	Nepoužívajte, kým si nepre•ítate a nepochopíte všetky bezpe•nostné opatrenia.
	SL	Ne uporabljajte, dokler se ne seznanite z vsemi varnostnimi ukrepi.
	FI	Lue varoitukset huolellisesti ennen käsittelyä.
	SV	Använd inte produkten innan du har läst och förstått säkerhetsanvisningarna

P210	Language	
	BG	•••••••• /••••••/••••••••••••/

P210	Language	
	ES	Mantener alejado de fuentes de calor, chispas, llama abierta o superficies calientes. – No fumar.
	CS	Chra•te p•ed teplem/jiskrami/otev•eným plamenem/horkými povrchy. – Zákaz kou•ení.
	DA	Holdes væk fra varme/gnister/åben ild/varme overflader. Rygning forbudt.
	DE	Von Hitze/Funken/offener Flamme/heißen Oberflächen fernhalten. Nicht rauchen.
	ET	Hoida eemal soojusallikast/sädemetest/leekidest/kuumadest pindadest. – Mitte suitsetada.
	EL	• • • • • • –
	EN	Keep away from heat/sparks/open flames/hot surfaces. – No smoking.
	FR	Tenir à l'écart de la chaleur/des étincelles/des flammes nues/des surfaces chaudes. – Ne pas fumer.
	GA	Coimeád ó theas/splancacha/lasair gan chosaint/dromchlaí te. – Ná caitear tobac.
	IT	Tenere lontano da fonti di calore/scintille/fiamme libere/superfici riscaldate. – Non fumare.
	LV	Nelietot viet•s, kur ir sastopams karstums/ dzirksteles/ atkl•ta uguns /... / karstas virsmas. Nesm•••t.
	LT	Laikyti atokiau nuo šilumos šaltinių/žiežirb•/atviros liepsnos/karšt• pavirši•. – Ner•kyti.
	HU	H•t•l/szikrától/nyílt lángtól/.../forró felületekt•l távol tartandó. Tilos a dohányzás.
	MT	•omm 'il bog•od mis-s•ana/xrar tan-nar/fjammet mikxufa/u•u•ja•arqu. - Трејјипх.
	NL	Verwijderd houden van warmte/vonken/open vuur/hete oppervlakken. – Niet roken.
	PL	Przechowywa• z dala od •róde• ciep•a/iskrzenia/otwartego ognia/gor•cych powierzchni. Palenie wzbronione.
	PT	Manter afastado do calor/faísca/chama aberta/superfícies quentes. – Não fumar.
	RO	A se p•stra departe de surse de c•ldur•/scântei/fl•c•ri deschise/suprafe•e încinse. – Fumatul interzis.
	SK	Uchovávejte mimo dosahu tepla/iskier/otvoreného oh•a/horúcich povrchov. Nefaj•ite.
	SL	Hraniti lo•eno od vro•ine/isker/odprtega ognja/vro•ih površin. – Kajeenje prepovedano.

P210	Language	
	FI	Suojaa lämmöltä/kipinöiltä/avotulelta/kuumilta pinnoilta. – Tupakointi kielletty.
	SV	Får inte utsättas för värme/gnistor/öppen låga/heta ytor. – Rökning förbjuden.

P211	Language	
	BG	.....
	ES	No pulverizar sobre una llama abierta u otra fuente de ignición.
	CS	Nest•ikejte do otev•eného ohn• nebo jiných zdroj• zapálení.
	DA	Spray ikke mod åben ild eller andre antændelseskilder.
	DE	Nicht gegen offene Flamme oder andere Zündquelle sprühen.
	ET	Mitte pihustada leekidesse või muusse süüteallikasse.
	EL	
	EN	Do not spray on an open flame or other ignition source.
	FR	Ne pas vaporiser sur une flamme nue ou sur toute autre source d'ignition.
	GA	Ná spraeáil ar lasair gan chosaint ná ar fhoirse eile adhainte.
	IT	Non vaporizzare su una fiamma libera o altra fonte di accensione.
	LV	Neizsmidzin•t uz atkl•tas uguns vai citiem aizdegšan•s avotiem.
	LT	Nepurkšti • atvir• liepsn• arba kitus degimo šaltinius.
	HU	Tilos nyílt lángra vagy más gyújtóforrásra permetezni.
	MT	Tisprejjax fuq fjamma mikxufa jew sors ie•or li jaqbad.
	NL	Niet in een open vuur of op andere ontstekingsbronnen spuiten.
	PL	Nie rozpyla• nad otwartym ogniem lub innym •ród•em zap•onu.
	PT	Não pulverizar sobre chama aberta ou outra fonte de ignição.
	RO	Nu pulveriza•i deasupra unei fl•c•ri deschise sau unei alte surse de aprindere.
	SK	Nestriekajte na otvorený ohe• ani iný zdroj zapálenia.
	SL	Ne pršiti proti odprtemu ognju ali drugemu viru vžiga.
	FI	Ei saa suihkuttaa avotuleen tai muuhun sytytyslähteeseen.
	SV	Spreja inte över öppen låga eller andra antändningskällor.

P220	Language	
	BG/...../.....

P220	Language	
	ES	Mantener o almacenar alejado de la ropa /.../ materiales combustibles.
	CS	Uchovávejte/skladujte odd•len• od od•v• /.../ho•lavých materiál•.
	DA	Må ikke anvendes/opbevares i nærheden af tøj/.../brændbare materialer.
	DE	Von Kleidung/.../brennbaren Materialien fernhalten/entfernt aufbewahren.
	ET	Hoida eemal rõivastest/.../süttivast materjalist.
	EL	
	EN	Keep/Store away from clothing/.../combustible materials.
	FR	Tenir/stocker à l'écart des vêtements/.../matières combustibles
	GA	Coimeád/Stóráil glan ar éadaí/.../ábhair indóite.
	IT	Tenere/conservare lontano da indumenti/...../ materiali combustibili.
	LV	Tur•t/ uzglab•t viet•s, kur nav piek•uves dr•b•m/ .../ uzliesmojšiem materi•liem.
	LT	Laikyti/sand•liuoti atokiau nuo drabuži•/.../degi• medžiag•.
	HU	Ruhától/.../éghet• anyagtól távol tartandó/tárolandó.
	MT	•omm/A••en 'il bog•od mill-•wejje•/.../materjali li jaqbd.
	NL	Van kleding/.../brandbare stoffen verwijderd houden/bewaren.
	PL	Trzymać/przechowywać z dala od odzie•y/.../materiałów zapalnych.
	PT	Manter/guardar afastado de roupa/.../matérias combustíveis.
	RO	A se p•stra/depozita departe de îmbr•c•minte/.../materiale combustibile.
	SK	Uchovávať/skladujte mimo odevov/.../hor•avých materiálov.
	SL	Hraniti lo•eno od obla•il/.../vnetljivih materialov.
	FI	Pidä/Varastoi erillään vaatetuksesta/.../syttivistä materiaaleista.
	SV	Hålls/förvarad åtskilt från kläder/.../brännbara material.

P221	Language	
	BG ••••• ••••• ••••• ••••• ••••• ••••• ••••• •••••
	ES	Tomar todas las precauciones necesarias para no mezclar con materias combustibles...
	CS	Prove•te preventivní opat•ení proti smíchání s ho•lavými materiály...
	DA	Undgå at blande med brændbare materialer...

P222	Language	
	FR	Ne pas laisser au contact de l'air.
	GA	Ná ceadaiigh teagmháil le haer.
	IT	Evitare il contatto con l'aria.
	LV	Nepieaut kontaktu ar gaisu.
	LT	Saugoti nuo kontakto su oru.
	HU	Nem érintkezhet levegővel.
	MT	Tallix li jkun hemm kuntatt ma' l-arja.
	NL	Contact met de lucht vermijden.
	PL	Nie dopuszcza do kontaktu z powietrzem.
	PT	Não deixar entrar em contacto com o ar.
	RO	A nu se lăsa în contact cu aerul.
	SK	Zabráte kontaktu so vzduchom.
	SL	Prepreiti stik z zrakom.
	FI	Ei saa joutua kosketuksiin ilman kanssa.
	SV	Undvik kontakt med luft.

P223	Language	
	BG	...............
	ES	Mantener alejado de cualquier posible contacto con el agua, pues reacciona violentamente y puede provocar una llamarada.
	CS	Chraťte před možným stykem s vodou kvůli prudké reakci a možnému náhlému vzplanutí.
	DA	Undgå enhver kontakt med vand, da dette kan fremkalde voldsom reaktion og risiko for eksplosionsagtig brand.
	DE	Kontakt mit Wasser wegen heftiger Reaktion und möglichem Aufflammen unbedingt verhindern.
	ET	Hoida igasuguse kokkupuute eest veega, vastasel juhul reageerib ägedalt ja võib põhjustada hetkpõlemise.
	EL	
	EN	Keep away from any possible contact with water, because of violent reaction and possible flash fire.
	FR	Éviter tout contact avec l'eau, à cause du risque de réaction violente et d'inflammation spontanée.
	GA	Ná ceadaiigh teagmháil de shaghas ar bith le huisce, mar gheall ar imoibriú foirtil agus splancthine a d'fhéadfadh a bheith ann.

P231	Language	
	SL	Hraniti v ustreznem inertnem plinu.
	FI	Käsitttele inertissä kaasussa.
	SV	Hanteras under inert gas.

P232	Language	
	BG	•••••••••••••••••.
	ES	Proteger de la humedad.
	CS	Chra•te p•ed vlhkem.
	DA	Beskyttes mod fugt.
	DE	Vor Feuchtigkeit schützen.
	ET	Hoida niiskuse eest.
	EL	
	EN	Protect from moisture.
	FR	Protéger de l'humidité.
	GA	Cosain ar thaise.
	IT	Proteggere dall'umidità.
	LV	Aizsarg•t no mitruma.
	LT	Saugoti nuo dr•gm•s.
	HU	Nedvességt•l védend•.
	MT	Ipprote•i mill-umdità.
	NL	Tegen vocht beschermen.
	PL	Chroni• przed wilgoci•.
	PT	Manter ao abrigo da humidade.
	RO	A se proteja de umiditate.
	SK	Chrà•te pred vlhkos•ou.
	SL	Zaš•ititi pred vlago.
	FI	Suojaa kosteudelta.
	SV	Skyddas från fukt.

P233	Language	
	BG	••••••••••••••••••••.
	ES	Mantener el recipiente herméticamente cerrado.
	CS	Uchovávejte obal t•sn• uzav•ený.
	DA	Hold beholderen tæt lukket.

P233	Language	
	DE	Behälter dicht verschlossen halten.
	ET	Hoida pakend tihedalt suletuna.
	EL	
	EN	Keep container tightly closed.
	FR	Maintenir le récipient fermé de manière étanche.
	GA	Coimeád an coimeádán dúnta go docht.
	IT	Tenere il recipiente ben chiuso.
	LV	Tvertni stingri nosl•gt.
	LT	Talpykl• laikyti sandariai uždaryt•.
	HU	Az edény szorosan lezárva tartandó.
	MT	•omm il-kontenitur mag•luq sew.
	NL	In goed gesloten verpakking bewaren.
	PL	Przechowywa• pojemnik szczelnie zamkni•ty.
	PT	Manter o recipiente bem fechado.
	RO	P•stra•i recipientul închis etan•.
	SK	Nádobu uchovávajúte tesne uzavretú.
	SL	Hraniti v tesno zaprti posodi.
	FI	Säilytä tiiviisti suljettuna.
	SV	Behållaren ska vara väl tillsluten.

P234	Language	
	BG	••••• ••••• ••••••••••.
	ES	Conservar únicamente en el recipiente original.
	CS	Uchovávejte pouze v p•vodním obalu.
	DA	Opbevares kun i den originale beholder.
	DE	Nur im Originalbehälter aufbewahren.
	ET	Hoida üksnes originaalpakendis.
	EL	
	EN	Keep only in original container.
	FR	Conserver uniquement dans le récipient d'origine.
	GA	Coimeád sa choimeádán bunaidh amháin.
	IT	Conservare soltanto nel contenitore originale.
	LV	Tur•t tikai ori•in•l• iepakojum•.
	LT	Laikyti tik originalioje talpykloje.
	HU	Az eredeti edényben tartandó.

P234	Language	
	MT	•omm biss fil-kontenitur ori•inali.
	NL	Uitsluitend in de oorspronkelijke verpakking bewaren.
	PL	Przechowywa• wy•cznie w oryginalnym pojemniku.
	PT	Conservar unicamente no recipiente de origem.
	RO	P•stra•i numai în recipientul original.
	SK	Uchovávať iba v pôvodnej nádobe.
	SL	Hraniti samo v originalni posodi.
	FI	Säilytä alkuperäispakkauksessa.
	SV	Förvaras endast i originalbehållaren.

P235	Language	
	BG	
	ES	Mantener en lugar fresco.
	CS	Uchovávejte v chladu.
	DA	Opbevares køligt.
	DE	Kühl halten.
	ET	Hoida jahedas.
	EL	• • ••••
	EN	Keep cool.
	FR	Tenir au frais.
	GA	Coimeád fionnuar é
	IT	Conservare in luogo fresco.
	LV	Tur•t v•sum•.
	LT	Laikyti v•sioje vietoje.
	HU	H•vös helyen tartandó.
	MT	•omm frisk.
	NL	Koel bewaren.
	PL	Przechowywa• w ch•odnym miejscu.
	PT	Conservar em ambiente fresco.
	RO	A se p•stra la rece.
	SK	Uchovávať v chlade.
	SL	Hraniti na hladnem.
	FI	Säilytä viileässä.
	SV	Förvaras svalt.

P240	Language	
	BG	/
	ES	Conectar a tierra / enlace equipotencial del recipiente y del equipo de recepción.
	CS	Uzemn•te obal a odb•rové za•ízení.
	DA	Beholder og modtageudstyr jordforbindes/potentialudlignes.
	DE	Behälter und zu befüllende Anlage erden.
	ET	Mahuti ja vastuvõtuseade maandada/ühendada.
	EL	•••••.
	EN	Ground/bond container and receiving equipment.
	FR	Mise à la terre/liaison équipotentielle du récipient et du matériel de réception.
	GA	Nasc an coimeádán agus an trealamh glactha leis an talamh.
	IT	Mettere a terra/massa il contenitore e il dispositivo ricevente.
	LV	Tvertnes un iek•rtas sa•emšanai ievietot zem•/ sasaist•t
	LT	•žeminti/•tvirtinti talpykl• ir pri•mimo •rang•.
	HU	A tárolóedényt és a fogadóedényt le kell földelni/át kell kötni.
	MT	Po••i ma' l-art/wa••al il-kontenitur u t-tag•mir li jir•ievi.
	NL	Opslag- en opvangreservoir aarden.
	PL	Uziemi•/po••czy• pojemnik i sprz•t odbiorczy.
	PT	Ligação à terra/equipotencial do recipiente e do equipamento receptor.
	RO	Leg•tur• la p•mânt/conexiune echipoten•ial• cu recipientul •i cu echipamentul de recep•ie.
	SK	Uzemnite/upevnite nádobu a plniace zariadenie.
	SL	Ozemljiti posodo in opremo za sprejem teko•ine.
	FI	Säiliö ja vastaanottavat laitteet on maadoitettava/yhdistettävä.
	SV	Jorda/potentialförbind behållare och mottagarutrustning.

P241	Language	
	BG	•• / / /.../ /
	ES	Utilizar un material eléctrico, de ventilación o de iluminación /.../ antideflagrante.
	CS	Používejte elektrické/ventila•ní/osv•tlovací/.../ za•ízení do výbušného prost•edí.

P241	Language	
	DA	Anvend eksplosionsikkert elektrisk/ventilations-/lys-/.../udstyr.
	DE	Explosionsgeschützte elektrische Betriebsmittel/Lüftungsanlagen/Beleuchtung/... verwenden.
	ET	Kasutada plahvatuskindlaid elektri-/ventilatsiooni-/valgustus-/.../seadmeid.
	EL	
	EN	Use explosion-proof electrical/ventilating/lighting/.../ equipment.
	FR	Utiliser du matériel électrique/de ventilation/d'éclairage/.../ antidéflagrant.
	GA	Bain úsáid as trealamh pléascdhíonach leictreach/aerála/soilsiúcháin/....
	IT	Utilizzare impianti elettrici/di ventilazione/d'illuminazione/.../ a prova di esplosione.
	LV	Izmantot spr•dziendrošas elektriskas/ ar ventil•ciju/ izgaismotas /.../ iek•rtas
	LT	Naudoti sprogimui atspari• elektros/ventiliacijos/apšvietimo/.../ •rang•.
	HU	Robbanásbiztos elektromos/szell•ztet•/világító/.../berendezés használandó.
	MT	U•a' tag•mir elettriku/ta' ventilazzjoni/ta' dawl/.../ li jifla• g•al splu•joni.
	NL	Explosie veilige elektrische/ventilatie-/verlichtings-/...apparatuur gebruiken.
	PL	U•ywa• elektrycznego/wentyluj•cego/o•wietleniowego/.../. przeciwwybuchowego sprz•tu.
	PT	Utilizar equipamento eléctrico/de ventilação/de iluminação/.../ à prova de explosão.
	RO	Utiliza•i echipamente electrice/de ventilare/de iluminat/.../ antideflagrante.
	SK	Používajte elektrické/ventila•né/osvet•ovacie/.../ zariadenie do výbušného prostredia.
	SL	Uporabiti elektri•no/prezra•evalno opremo, opremo za razsvetljavo/.../, odporno proti eksplozijam.
	FI	Käytä räjähdysturvallisia sähkö/ilmanvaihto/valaisin/... /laitteita.
	SV	Använd explosionssäker elektrisk/ventilations-/belysnings-/.../ utrustning.

P242	Language	
	BG ,

P242	Language	
	ES	Utilizar únicamente herramientas que no produzcan chispas.
	CS	Používejte pouze ná•adí z nejkš•ícího kovu.
	DA	Anvend kun værktøj, som ikke frembringer gnister.
	DE	Nur funkenfreies Werkzeug verwenden.
	ET	Mitte kasutada seadmeid, mis võivad tekitada sädemeid.
	EL	
	EN	Use only non-sparking tools.
	FR	Ne pas utiliser d'outils produisant des étincelles.
	GA	Bain úsáid as uirlisí neamhspréachta amháin.
	IT	Utilizzare solo utensili antiscintillamento.
	LV	Izmantot instrumentus, kas nerada dzirksteles.
	LT	Naudoti tik kibirkš•i• nekelian•ius •rankius.
	HU	Szikramentes eszközök használandók.
	MT	U•a' biss g•odda li ma jtajrux •nied.
	NL	Uitsluitend vonkvrij gereedschap gebruiken.
	PL	U•ywa• wy••cznie nieiskrz•cych narz•dzi.
	PT	Utilizar apenas ferramentas antichispa.
	RO	Nu utiliza•i unelte care produc scântei.
	SK	Používajte iba neiskriace prístroje.
	SL	Uporabiti le orodje, ki ne povzro•a isker.
	FI	Käytä ainoastaan kipinöimättömiä työkaluja.
	SV	Använd endast verktyg som inte ger upphov till gnistor.

P243	Language	
	BG	•••••• •••••••• ••
	ES	Tomar medidas de precaución contra descargas electrostáticas.
	CS	Prove•te preventivní opat•ení proti výboj•m statické elekt•iny.
	DA	Træf foranstaltninger mod statisk elektricitet.
	DE	Maßnahmen gegen elektrostatische Aufladungen treffen.
	ET	Rakendada ettevaatusabinõusid staatilise elektri vastu.
	EL	••••••••••.
	EN	Take precautionary measures against static discharge.

P243	Language	
	FR	Prendre des mesures de précaution contre les décharges électrostatiques.
	GA	Déan bearta réamhchúraim in aghaidh dífluchtú statach.
	IT	Prendere precauzioni contro le scariche elettrostatiche.
	LV	Nodrošināties pret statiskās enerģijas izlādi.
	LT	Imtis atsargumo priemonių statinei iškrovai išvengti.
	HU	Az elektrosztatikus kisülés megakadályozására óvintézkedéseket kell tenni.
	MT	• u mi•uri ta’ prekawzjoni kontra l-•ru• ta’ elettriku statiku.
	NL	Voorzorgsmaatregelen treffen tegen ontladingen van statische elektriciteit.
	PL	Przedsi•wzi•••••rodki ostro•no•ci zapobiegaj•ce statycznemu roz•adowaniu.
	PT	Evitar acumulação de cargas electrostáticas.
	RO	Lua•i m•suri de precau•ie împotriva desc•rc•rilor electrostatice.
	SK	Urobte preventívne opatrenia proti výbojom statickej elektriny.
	SL	Prepre•iti stati•no naelektrenje.
	FI	Estä staattisen sähköön aiheuttama kipinäinti.
	SV	Vidta åtgärder mot statisk elektricitet.

P244	Language	
	BG	•• ••••••••••••••••••
	ES	Mantener las válvulas de reducción limpias de grasa y aceite.
	CS	Udržujte redukční ventily bez maziva a oleje.
	DA	Reduktionsventilerne holdes fri for fedt og olie.
	DE	Druckminderer frei von Fett und Öl halten.
	ET	Hoida reduktsiooniklapid rasvast ja õlist puhtad.
	EL	
	EN	Keep reduction valves free from grease and oil.
	FR	S’assurer de l’absence de graisse ou d’huile sur les soupapes de réduction.
	GA	Coimeád comhlaí brúlaghdaithe saor ó ghréisc agus ó ola.
	IT	Mantenere le valvole di riduzione libere da grasso e olio.
	LV	Tur•t reduc•šan•s v•rstus t•rus no taukiem un e••as.
	LT	Saugoti, kad ant redukcini• vožtuv• nepatekt• riebal• ir tepal•.

	HU	A nyomáscsökkenet • szelepeket zsírtól és olajtól mentesen kell tartani.
	MT	•omm il-valvs ta' tnaqqis •ielsa mill-gri• u •-•ejt.
	NL	Reduceerventielen vrij van olie en vet houden.
	PL	Chroni• zawory redukcynje przed t•uszczem i olejem.
	PT	Manter as válvulas de redução isentas de óleo e massa lubrificantes.
	RO	Proteja•i supapele reductoare de gr•simi •i ulei.
	SK	Reduk•né ventily udržiavajte bez mazadiel a oleja.
	SL	Prepre•iti stik reducirnih ventilov z mastjo in oljem.
	FI	Pidä paineenalennusventtiilit vapaana rasvasta ja öljystä.
	SV	Reducerventilerna ska hållas fria från fett och olja.

P250	Language	
	BG	•••••••••••••• /••••/.../••••••••
	ES	Evitar la abrasión/el choque/.../la fricción.
	CS	Nevystavujte obrušování/náraz•m/.../t•ení.
	DA	Må ikke udsættes for slibning/stød/.../gnidning.
	DE	Nicht schleifen/stoßen/.../reiben.
	ET	Hoida kriimustamise/põrutuse/.../hõõrdumise eest.
	EL	
	EN	Do not subject to grinding/shock/.../friction.
	FR	Éviter les abrasions/les chocs/.../les frottements.
	GA	Ná nocht do mheilt/do thurraing/.../do fhrithchuimilt.
	IT	Evitare le abrasioni /gli urti/.../gli attriti.
	LV	Nepak•aut drupin•šanai / triecienam/.../ berzei
	LT	Nešlifuoti/netrankyti/.../netrinti.
	HU	Tilos csiszolásnak/ütésnek/.../súrlódásnak kitenni.
	MT	Tissottoponihomx g•al brix/xokk/.../frizzjoni.
	NL	Malen/schokken/.../wrijving vermijden.
	PL	Nie poddawa• szlifowaniu/wstrz•som/.../tarcia.
	PT	Não submeter a trituração/choque/.../fricção.
	RO	A nu supune la abraziuni/•ocuri/.../frecare.
	SK	Nevystavujte brúseniu/nárazu/.../treniu.
	SL	Ne izpostavljati drgnjenju/udarcem/.../trenju.
	FI	Suojele rasiukselta/iskuilta/.../hankaukselta.
	SV	Får inte utsättas för gnidning/stötar/.../friktion.

P251	Language	
	BG	••••••••••••••••; •••••• ••••••••••••••••
	ES	Recipiente a presión: no perforar ni quemar, aun después del uso.
	CS	Tlakový obal: nepropichujte nebo nespalujte ani po použití.
	DA	Beholder under tryk: Må ikke punkteres eller brændes, heller ikke efter brug.
	DE	Behälter steht unter Druck: Nicht durchstechen oder verbrennen, auch nicht nach der Verwendung.
	ET	Mahuti on rõhu all: mitte purustada ega põletada isegi pärast kasutamist.
	EL	••••••.
	EN	Pressurized container: Do not pierce or burn, even after use.
	FR	Réceptif sous pression: ne pas perforer, ni brûler, même après usage.
	GA	Coimeádán brúchóirithe: Ná toll agus ná dóigh, fiú tar éis úsáide.
	IT	Recipiente sotto pressione: non perforare né bruciare, neppure dopo l'uso.
	LV	Tvertne zem spiediena: nedurt vai nededzin•t, ar•p•c izlietošanas.
	LT	Sl•ginis indas. Nepradurti ir nedeginti net panaudoto.
	HU	Nyomás alatt edény: ne lyukassza ki vagy égesse el, még használat után sem.
	MT	Kontenitur ta•t pressjoni: Ittaqqbux jew ta•arqux, anki wara li tu•ah.
	NL	Houder onder druk: ook na gebruik niet doorboren of verbranden.
	PL	Pojemnik pod ci•nieniem. Nie przek•uwa• ani nie spala•, nawet po zu•yciu.
	PT	Recipiente sob pressão. Não furar nem queimar, mesmo após utilização.
	RO	Recipient sub presiune. Nu perfora•i sau arde•i, chiar •i dup•utilizare.
	SK	Nádoba je pod tlakom: neprepichujte alebo nespa•ujte ju, a to ani po spotrebovaní obsahu.
	SL	Posoda je pod tlakom: ne preluknjajte ali sežigajte je niti, ko je prazna.
	FI	Painesäiliö: Ei saa puhkaista tai polttaa edes tyhjänä.
	SV	Tryckbehållare: Får inte punkteras eller brännas, gäller även tömd behållare.

P260	Language	
	BG	/•••••/•••/•••/ /
	ES	No respirar el polvo/el humo/el gas/la niebla/los vapores/el aerosol.
	CS	Nevdechujte prach/dým/plyn/mlhu/páry/aerosoly.
	DA	Indånd ikke pulver/røg/gas/tåge/damp/spray.
	DE	Staub/Rauch/Gas/Nebel/Dampf/Aerosol nicht einatmen.
	ET	Tolmu/suitsu/gaasi/udu/auru/pihustatud ainet mitte sisse hingata.
	EL	
	EN	Do not breathe dust/fume/gas/mist/vapours/spray.
	FR	Ne pas respirer les poussières/fumées/gaz/brouillards/vapeurs/aérosols.
	GA	Ná hanálaigh deannach/múch/gás/ceo/gala/sprae.
	IT	Non respirare la polvere/i fumi/i gas/la nebbia/i vapori/gli aerosol.
	LV	Neieelpot putek•us/ tvaikus/ g•zi/ d•mus/ izgarojumus/ smidzin•jumu.
	LT	Ne•kv•pti dulki•/d•m•/duj•/r•ko/gar•/aerazolio.
	HU	A por/füst/gáz/köd/g•zök/permet belélegzése tilos.
	MT	Tiblax bin-nifs trabijiet/d•a•en/gass/raxx/fwar/sprej.
	NL	Stof/rook/gas/nevel/damp/spuitnevel niet inademen.
	PL	Nie wdycha• py•u/dymu/gazu/mg•y/par/rozpylonej cieczy.
	PT	Não respirar as poeiras/fumos/gases/névoas/vapores/aerossóis.
	RO	Nu inspira•i praful/fumul/gazul/cea•a/vaporii/spray-ul.
	SK	Nevdychujte prach/dym/plyn/hmlu/pary/aerosóly.
	SL	Ne vdihavati prahu/dima/plina/megllice/hlapov/razpršila.
	FI	Älä hengitä pölyä/savua/kaasua/sumua/höyryä/suihketta.
	SV	Inandas inte damm/rök/gaser/dimma/ångor/sprej.

P261	Language	
	BG	•••••/•••••••/•••/•••/ /
	ES	Evitar respirar el polvo/el humo/el gas/la niebla/los vapores/el aerosol.
	CS	Zamezte vdechování prachu/dýmu/plynu/mlhy/par/aerosol•.
	DA	Undgå indånding af pulver/røg/gas/tåge/damp/spray.

P261	Language	
	DE	Einatmen von Staub/Rauch/Gas/Nebel/Dampf/Aerosol vermeiden.
	ET	Vältida tolmu/suitsu/gaasi/udu/auru/pihustatud aine sissehingamist.
	EL	
	EN	Avoid breathing dust/fume/gas/mist/vapours/spray.
	FR	Éviter de respirer les poussières/fumées/gaz/brouillards/vapeurs/aérosols.
	GA	Seachain deannach/múch/gás/ceo/gala/sprae a análú.
	IT	Evitare di respirare la polvere/i fumi/i gas/la nebbia/i vapori/gli aerosol.
	LV	Izvairties ieelpot putekus/ tvaikus/ gāzi/ dūmus/ izgarojumus/ smidzinājumu.
	LT	Stengtis nekvėpti dulki•/dūm•/dujų•/rūko/gar•/aerozolio.
	HU	Kerülje a por/füst/gáz/köd/gőzök/permet belélegzését.
	MT	Evita li tibra' bin-nifs trabijiet/dust•en/gass/raxx/fwar/sprej.
	NL	Inademing van stof/rook/gas/nevel/damp/spuitnevel vermijden.
	PL	Unikać wdechania pyłu/dymu/gazu/mgły/par/rozpylonej cieczy.
	PT	Evitar respirar as poeiras/fumos/gases/névoas/vapores/aerossóis.
	RO	Evita să respiri praful/fumul/gazul/cea/vaporii/spray-ul.
	SK	Zabráňte vdychovaniu prachu/dymu/plynu/hmlý/pár/aerosólov.
	SL	Ne vdihavati prahu/dima/plina/meglíce/hlapov/razpršila.
	FI	Vältä pölyn/savun/kaasun/sumun/höyryn/suihkeen hengittämistä.
	SV	Undvik att inandas damm/rök/gaser/dimma/ångor/sprej.

P262	Language	
	BG,
	ES	Evitar el contacto con los ojos, la piel o la ropa.
	CS	Zabraňte styku s očima, kůží nebo oděvem.
	DA	Må ikke komme i kontakt med øjne, hud eller tøj.
	DE	Nicht in die Augen, auf die Haut oder auf die Kleidung gelangen lassen.
	ET	Vältida silma, nahale või rõivastele sattumist.
	EL	
	EN	Do not get in eyes, on skin, or on clothing.
	FR	Éviter tout contact avec les yeux, la peau ou les vêtements.

P262	Language	
	GA	Ná lig sna súile, ar an gcráiceann, ná ar éadaí.
	IT	Evitare il contatto con gli occhi, la pelle o gli indumenti.
	LV	Nepie•aut nok••šanu ac•s, uz •das vai uz dr•b•m.
	LT	Saugotis, kad nepatekt• • akis, ant odos ar drabuži•.
	HU	Szembe, b•rre vagy ruhára nem kerülhet.
	MT	Idda••alx fl-g•ajnejn, fuq il-•ilda, jew fuq il-•wejje•.
	NL	Contact met de ogen, de huid of de kleding vermijden.
	PL	Nie wprowadza• do oczu, na skór• lub na odzie•.
	PT	Não pode entrar em contacto com os olhos, a pele ou a roupa.
	RO	Evita•i orice contact cu ochii, pielea sau îmbr•c•minte.
	SK	Zabrá•te kontaktu s o•ami, pokožkou alebo odevom.
	SL	Prepre•iti stik z o•mi, kožo ali obla•ili.
	FI	Varo kemikaalin joutumista silmiin, iholle tai vaatteisiin.
	SV	Får inte komma i kontakt med ögonen, huden eller kläderna.

P263	Language	
	BG	/
	ES	Evitar el contacto durante el embarazo/la lactancia.
	CS	Zabra•te styku b•hem t•hotenství/kojení.
	DA	Undgå kontakt under graviditet/amning.
	DE	Kontakt während der Schwangerschaft/und der Stillzeit vermeiden.
	ET	Vältida kokkupuudet raseduse/imetamise ajal.
	EL	A •••
	EN	Avoid contact during pregnancy/while nursing.
	FR	Éviter tout contact avec la substance au cours de la grossesse/pendant l'allaitement.
	GA	Seachain teagmháil le linn toirchis/agus an chíos á tabhairt.
	IT	Evitare il contatto durante la gravidanza/l'allattamento.
	LV	Izvair•ties no saskares gr•tniec•bas laik• / barojot b•rnu ar kr•ti.
	LT	Vengti kontakto n•štumo metu/maitinant kr•timi.
	HU	A terhesség/szoptatás alatt kerülni kell az anyaggal való érintkezést.
	MT	Evita l-kuntatt waqt it-tqala/waqt it-treddig•.
	NL	Bij zwangerschap of borstvoeding aanraking vermijden.
	PL	Unika• kontaktu w czasie ci••y/karmienia piersi•.

P263	Language	
	PT	Evitar o contacto durante a gravidez/o aleitamento.
	RO	Evita•i contactul în timpul sarcinii/al•pt•rii.
	SK	Zabrá•te kontaktu po•as tehotenstva a doj•enia.
	SL	Prepre•iti stik med nose•nostjo/dojenjem.
	FI	Vältä kosketusta raskauden tai imetyksen aikana.
	SV	Undvik kontakt under graviditet eller amning.

P264	Language	
	BG	••••••••... ••••
	ES	Lavarse ... concienzudamente tras la manipulación.
	CS	Po manipulaci d•kladn• omyjte
	DA	Vask ... grundigt efter brug.
	DE	Nach Gebrauch ... gründlich waschen.
	ET	Pärast käitlemist pesta hoolega
	EL	
	EN	Wash ... thoroughly after handling.
	FR	Se laver ... soigneusement après manipulation.
	GA	Nigh ... go lánchúramach tar éis láimhsithe.
	IT	Lavare accuratamente ... dopo l'uso.
	LV	P•c izmantošanas ... k•rt•gi nomazg•t.
	LT	Po naudojimo kruopš•iai nuplauti ...
	HU	A használatot követ•en a(z) ... -t alaposan meg kell mosni.
	MT	A•sel ... sew wara li timmani••jah.
	NL	Na het werken met dit product ... grondig wassen.
	PL	Dok•adnie umy• ... po u•yciu.
	PT	Lavar ... cuidadosamente após manuseamento.
	RO	Sp•la•i-v• ... bine dup• utilizare.
	SK	Po manipulácii starostlivo umyte...
	SL	Po uporabi temeljito umiti ...
	FI	Pese ... huolellisesti käsittelyn jälkeen.
	SV	Tvätta ... grundligt efter användning.

P270	Language	
	BG	••••••••, ••••••••
	ES	No comer, beber ni fumar durante su utilización.

P270	Language	
	CS	P•i používání tohoto výrobku nejezte, nepijte ani neku•te.
	DA	Der må ikke spises, drikkes eller ryges under brugen af dette produkt.
	DE	Bei Gebrauch nicht essen, trinken oder rauchen.
	ET	Toote käitlemise ajal mitte süüa, juua ega suitsetada.
	EL	•••••.
	EN	Do no eat, drink or smoke when using this product.
	FR	Ne pas manger, boire ou fumer en manipulant ce produit.
	GA	Ná hith, ná hól agus ná caitear tobac agus an táirge seo á úsáid.
	IT	Non mangiare, né bere, né fumare durante l'uso.
	LV	Ne•st, nedzert un nesm•••t produkta izmantošanas laik•.
	LT	Naudojant š• produkt•, nevalgyti, negerti ir ner•kyti.
	HU	A termék használatá közben tilos enni, inni vagy dohányozni.
	MT	Tikolx, tixrobx u tpejjipx waqt li tu•a' dan il-prodott.
	NL	Niet eten, drinken of roken tijdens het gebruik van dit product.
	PL	Nie je••, nie pi• i nie pali• podczas u•ywnia produktu.
	PT	Não comer, beber ou fumar durante a utilização deste produto.
	RO	A nu mânca, bea sau fuma în timpul utiliz•rii produsului.
	SK	Pri používání výrobku nejedzte, nepite ani nefaj•ite.
	SL	Ne jesti, piti ali kaditi med uporabo tega izdelka.
	FI	Syöminen, juominen ja tupakointi kielletty kemikaalia käytettäessä.
	SV	Ät inte, drick inte och rök inte när du använder produkten.

P271	Language	
	BG	••••• •••••.
	ES	Utilizar únicamente en exteriores o en un lugar bien ventilado.
	CS	Používejte pouze venku nebo v dob•e v•traných prostorách.
	DA	Brug kun udendørs eller i et rum med god udluftning.
	DE	Nur im Freien oder in gut belüfteten Räumen verwenden.
	ET	Käidelda üksnes välitingimustes või hästi ventileeritavas kohas.
	EL	
	EN	Use only outdoors or in a well-ventilated area.
	FR	Utiliser seulement en plein air ou dans un endroit bien ventilé.
	GA	Úsáid amuigh faoin aer nó i limistéar dea-aerálaithe amháin.

P271	Language	
	IT	Utilizzare soltanto all'aperto o in luogo ben ventilato.
	LV	Izmantot tikai •r• vai labi v•din•m•s telp•s.
	LT	Naudoti tik lauke arba gerai v•dinamoje patalpoje.
	HU	Kizárólag szabadban vagy jól szell•z• helyiségben használható.
	MT	U•a biss barra jew f'post ventilat sew.
	NL	Alleen buiten of in een goed geventileerde ruimte gebruiken.
	PL	Stosowa• wy•cznie na zewn•trz lub w dobrze wentylowanym pomieszczeniu
	PT	Utilizar apenas ao ar livre ou em locais bem ventilados.
	RO	A se utiliza numai în aer liber sau în spa•ii bine ventilate.
	SK	Používajte iba na vo•nom priestranstve alebo v dobre vetranom priestore.
	SL	Uporabljati le zunaj ali v dobro prezra•evanem prostoru.
	FI	Käytä ainoastaan ulkona tai tiloissa, joissa on hyvä ilmanvaihto.
	SV	Används endast utomhus eller i väl ventilerade utrymmen.

P272	Language	
	BG	•••••••••• ••••••••••••••••••••
	ES	Las prendas de trabajo contaminadas no podrán sacarse del lugar de trabajo.
	CS	Kontaminovaný pracovní od•v neodnášejte z pracovišt•.
	DA	Tilsmudset arbejdstøj bør ikke fjernes fra arbejdspladsen.
	DE	Kontaminierte Arbeitskleidung nicht außerhalb des Arbeitsplatzes tragen.
	ET	Saastunud töörõivaid töökohast mitte välja viia.
	EL	
	EN	Contaminated work clothing should not be allowed out of the workplace.
	FR	Les vêtements de travail contaminés ne devraient pas sortir du lieu de travail.
	GA	Níor chóir éadaí éillithe oibre a ligean amach as an láthair oibre.
	IT	Gli indumenti da lavoro contaminati non devono essere portati fuori dal luogo di lavoro.
	LV	Pies•r•oto darba ap••rbu neiznest •rpus darba telp•m.
	LT	Užteršt• darbo drabuži• negalima išnešti iš darbo vietos.
	HU	Szennyezett munkaruhát tilos kivinni a munkahely területér•l.

P272	Language	
	MT	Ilbies tax-xog•ol kontaminat m'g•andux jit•alla jo•ro• mill-post tax-xog•ol.
	NL	Verontreinigde werkkleding mag de werkruimte niet verlaten.
	PL	Zanieczyszczonej odzie•y ochronnej nie wynosi• poza miejsce pracy.
	PT	A roupa de trabalho contaminada não pode sair do local de trabalho.
	RO	Nu scoate•i îmbr•c•mintea de lucru contaminat• în afara locului de munc•.
	SK	Je zakázané vynies• kontaminovaný pracovný odev z pracoviska.
	SL	Kontaminirana delovna obla•ila niso dovoljena zunaj delovnega mesta.
	FI	Saastuneita työvaatteita ei saa viedä työpaikalta.
	SV	Nedstänkta arbetskläder får inte avlägsnas från arbetsplatsen.

P273	Language	
	BG	•••••••••• ••••••••••.
	ES	Evitar su liberación al medio ambiente.
	CS	Zabra•te uvoln•ní do životního prost•edí.
	DA	Undgå udledning til miljøet.
	DE	Freisetzung in die Umwelt vermeiden.
	ET	Vältida sattumist keskkonda.
	EL	
	EN	Avoid release to the environment.
	FR	Éviter le rejet dans l'environnement.
	GA	Ná scaoiltear amach sa chomhshaol.
	IT	Non disperdere nell'ambiente.
	LV	Izvair•ties no izplat•šanas apk•rt•j• vid•.
	LT	Saugoti, kad nepatekt• • aplink•.
	HU	Kerülni kell az anyagnak a környezetbe való kijutását.
	MT	Evita r-rilaxx fl-ambjent.
	NL	Voorkom lozing in het milieu.
	PL	Unika• uwolnienia do •rodowiska.
	PT	Evitar a libertação para o ambiente.
	RO	Evita•i dispersarea în mediu.
	SK	Zabrá•te uvo•neniu do životného prostredia.
	SL	Prepre•iti sproš•anje v okolje.

P273	Language	
	FI	Vältettävä päästämistä ympäristöön.
	SV	Undvik utsläpp till miljön.

P280	Language	
	BG//
	ES	Llevar guantes/prendas/gafas/máscara de protección.
	CS	Používejte ochranné rukavice/ochranný od•v/ochranné brýle/obli•ejový štít.
	DA	Bær beskyttelseshandsker/beskyttelsestøj/øjenbeskyttelse/ansigtsbeskyttelse
	DE	Schutzhandschuhe/Schutzkleidung/Augenschutz/Gesichtsschutz tragen.
	ET	Kanda kaitsekindaid/kaitserõivastust/kaitseprille/kaitsemaski.
	EL	
	EN	Wear protective gloves/protective clothing/eye protection/face protection.
	FR	Porter des gants de protection/des vêtements de protection/un équipement de protection des yeux/ du visage.
	GA	Caith lámhainní cosanta/éadaí cosanta/cosaint súile/cosaint aghaidhe.
	IT	Indossare guanti/indumenti protettivi/Proteggere gli occhi/il viso.
	LV	Izmantot aizsargcimdus/ aizsargdr•bes/ acu aizsargus/ sejas aizsargus.
	LT	M•v•ti apsaugines pirštines/d•v•ti apsauginius drabužius/naudoti aki• (veido) apsaugos priemonės.
	HU	Véd•keszty•/véd•ruha/szemvéd•/arcvéd• használatra kötelező•.
	MT	Ilbes ingwanti protettivi/ilbies protettiv/protezzjoni g•all-g•ajnejn/protezzjoni g•all-wi••.
	NL	Beschermende handschoenen/beschermende kleding/oog-bescherming/gelaatsbescherming dragen.
	PL	Stosowa• r•kawice ochronne/ odzie• ochronn•/ ochron• oczu /ochron• twarzy.
	PT	Usar luvas de protecção/vestuário de protecção/protecção ocular/protecção facial.
	RO	Purta•i m•nu•i de protec•ie/îmbr•c•minte de protec•ie/echipament de protec•ie a ochilor/ echipament de protec•ie a fe•ei.
	SK	Noste ochranné rukavice/ochranný odev/ochranné okuliare/ochranu tváre.

P280	Language	
	SL	Nositi zaš•itne rokavice/zaš•itno obleko/zaš•ito za o•i/zaš•ito za obraz.
	FI	Käytä suojakäsineitä/suojavaatetusta/silmiensuojainta /kasvosuojainta.
	SV	Använd skyddshandskar/skyddskläder/ögonskydd/ansiktsskydd.

P281	Language	
	BG	•••••
	ES	Utilizar el equipo de protección individual obligatorio.
	CS	Používejte požadované osobní ochranné prostředky.
	DA	Anvend de påkrævede personlige værnemidler.
	DE	Vorgeschriebene persönliche Schutzausrüstung verwenden.
	ET	Kasutada vajalikke isikukaitsevahendeid.
	EL	••••••••••.
	EN	Use personal protective equipment as required.
	FR	Utiliser l'équipement de protection individuel requis.
	GA	Bain úsáid as an trealamh cosanta pearsanta faoi mar a éilítear.
	IT	Utilizzare il dispositivo di protezione individuale richiesto.
	LV	Izmantot personisko aizsargapr•kojumu atbilstoši pras•b•m.
	LT	Naudoti reikalaujamas asmenines apsaugos priemonės.
	HU	Az el•írt egyéni véd•felszerelés használata kötelez•.
	MT	U•a' t-tag•mir personali protettiv kif me•tie•.
	NL	De nodige persoonlijke beschermingsuitrusting gebruiken.
	PL	Stosowa• wymagane •rodki ochrony indywidualnej.
	PT	Usar o equipamento de protecção individual exigido.
	RO	Utiliza•i echipamentul de protec•ie individual• conform cerin•elor.
	SK	Používaj•te predpísané osobné ochranné prostriedky.
	SL	Uporabiti predpisano osebno zaš•itno opremo.
	FI	Käytä vaadittuja henkilönsuojaimia.
	SV	Använd föreskriven personlig skyddsutrustning.

P283	Language	
	ES	Llevar prendas ignífugas/resistentes al fuego/resistentes a las llamas.
	CS	Používejte ohnivzdorný/neho•lavý od•v.
	DA	Bær brandbestandig/brandhæmmende beklædning.
	DE	Schwer entflammbare /flammhemmende Kleidung tragen.
	ET	Kanda tule-/leegikindlat/tule levikut aeglustavat rõivastust.
	EL	
	EN	Wear fire/flame resistant/retardant clothing.
	FR	Porter des vêtements résistant au feu/aux flammes/ignifuges.
	GA	Caith éadaí dódhíonacha/lasairdhíonacha nó dómhoillitheacha/lasairmhoillitheacha.
	IT	Indossare indumenti completamente ignifughi o in tessuti ritardanti di fiamma.
	LV	Izmantot aizsargap••rbu pret uguni/liesm•m.
	LT	D•v•ti ugniai/liepsnai atsparius/antipireninius drabužius.
	HU	T•z-/lángálló/-késleltet• ruházat viselése kötelez•.
	MT	Ilbies •wejje• re•istenti g•an-nar/fjammi.
	NL	Vuur/vlambestendige/brandwerende kleding dragen.
	PL	Nosi• odzie• ogniodporn•/p•omieniodporn•/opó•niaj•c• zapalenie.
	PT	Usar vestuário ignífugo/retardador de fogo/chamas.
	RO	Purta•i îmbr•c•minte rezistent• la foc/flac•r•/ignifug•.
	SK	Noste oh•ovzdorný odev/odev so zníženou hor•avos•ou.
	SL	Nositi negorljiva obla•ila in obla•ila, odporna proti ognju.
	FI	Käytä palosuojattua/paloturvallista vaatetusta.
	SV	Använd brand-/flamsäkra eller brand-/flamhämmande kläder.

P284	Language	
	BG	
	ES	Llevar equipo de protección respiratoria.
	CS	Používejte vybavení pro ochranu dýchacích cest.
	DA	Anvend åndedrætsværn.
	DE	Atemschutz tragen.
	ET	Kanda hingamisteede kaitsevahendeid.
	EL	
	EN	Wear respiratory protection.

P285	Language	
	MT	F'ka• ta' ventilazzjoni inadegwata ilbes protezzjoni respiratorja.
	NL	Bij ontoereikende ventilatie een geschikte adembescherming dragen.
	PL	W przypadku niedostatecznej wentylacji stosowa• indywidualne •rodki ochrony dróg oddechowych.
	PT	Em caso de ventilação inadequada, usar protecção respiratória.
	RO	În cazul în care ventilarea este insuficient•, purta•i echipament de protec•ie respiratorie.
	SK	V prípade nedostato•ného vetrania, používajte ochranu dýchacích ciest.
	SL	Ob nezadostnem prezra•evanju nositi opremo za zaš•ito dihal.
	FI	Käytä hengityksensuojainta, jos ilmanvaihto on riittämätön.
	SV	Använd andnings skydd vid otillräcklig ventilation.

P231 + P232	Language	
	BG	•••••
	ES	Manipular en gas inerte. Proteger de la humedad.
	CS	Manipulace pod inertním plynem. Chra•te p•ed vlhkem.
	DA	Anvendes under inaktiv gas. Beskyttes mod fugt.
	DE	Unter inertem Gas handhaben. Vor Feuchtigkeit schützen.
	ET	Käidelda inertgaasis. Hoida niiskuse eest.
	EL	•••••• ••••••.
	EN	Handle under inert gas. Protect from moisture.
	FR	Manipuler sous gaz inerte. Protéger de l'humidité.
	GA	Láimhsigh faoi thriathghás. Cosain ó thaise.
	IT	Manipolare in atmosfera di gas inerte. Tenere al riparo dall'umidità.
	LV	Izmantot tikai inertas g•zes apst•k•os. Aizsarg•t no mitruma.
	LT	Tvarkyti inertin•se dujose. Saugoti nuo dr•gm•s.
	HU	Inert gázban használandó. Nedvesség•l védend•.
	MT	U•a' ta•t gass inerti. Ipprote•i mill-umdità.
	NL	Onder inert gas werken. Tegen vocht beschermen.
	PL	U•ywa• w atmosferze oboj•tnego gazu Chroni• przed wilgoci•.

P231 + P232	Language	
	PT	Manusear em atmosfera de gás inerte. Manter ao abrigo da humidade.
	RO	A se manipula sub un gaz inert. A se proteja de umiditate.
	SK	Manipulujte v prostredí s inertným plynom. Chráňte pred vlhkosťou.
	SL	Hraniti v ustreznem inertnem plinu. Zaščititi pred vlago.
	FI	Käsittele inertissä kaasussa. Suojaa kosteudelta.
	SV	Hanteras under inert gas. Skyddas från fukt.

P235 + P410	Language	
	BG	
	ES	Conservar en un lugar fresco. Proteger de la luz del sol.
	CS	Uchovávejte v chladu. Chraňte před slunečním zářením.
	DA	Opbevares køligt. Beskyttes mod sollys.
	DE	Kühl halten. Vor Sonnenbestrahlung schützen.
	ET	Hoida jahedas. Hoida päikesevalguse eest.
	EL	
	EN	Keep cool. Protect from sunlight.
	FR	Tenir au frais. Protéger du rayonnement solaire.
	GA	Coimeád fionnuar. Cosain ó sholas na gréine.
	IT	Tenere in luogo fresco. Proteggere dai raggi solari.
	LV	Turēt vīsum. Aizsargāt no saules gaismas.
	LT	Laikyti vėsioje vietoje. Saugoti nuo saulės šviesos.
	HU	Hűvös helyen tartandó. Napfénytől védendő.
	MT	•omm frisk. Ipprote•i mir-ra••i tax-xemx.
	NL	Koel bewaren. Tegen zonlicht beschermen.
	PL	Przechowywać w chłodnym miejscu. Chronić przed słońcem.
	PT	Conservar em ambiente fresco. Manter ao abrigo da luz solar.
	RO	A se păstra la rece. A se proteja de lumina solară.
	SK	Uchovávejte v chlade. Chráňte pred slnečným žiarením.

P235 + P410	Language	
	SL	Hraniti na hladnem. Zaš•ititi pred son•no svetlobo.
	FI	Säilytä viileässä. Suojaa auringonvalolta.
	SV	Förvaras svalt. Skyddas från solljus.

Table 1.3
Precautionary statements – Response

P301	Language	
	BG	
	ES	EN CASO DE INGESTIÓN:
	CS	P•I POŽITÍ:
	DA	I TILFÆLDE AF INDTAGELSE:
	DE	BEI VERSCHLUCKEN:
	ET	ALLANEELAMISE KORRAL:
	EL	
	EN	IF SWALLOWED:
	FR	EN CAS D'INGESTION:
	GA	MÁ SHLOGTAR:
	IT	IN CASO DI INGESTIONE:
	LV	NOR•ŠANAS GAD•JUM•:
	LT	PRARIJUS:
	HU	LENYELÉS ESETÉN:
	MT	JEKK JINBELA':
	NL	NA INSLIKKEN:
	PL	W PRZYPADKU PO•KNI•CIA:
	PT	EM CASO DE INGESTÃO:
	RO	ÎN CAZ DE ÎNGHI•IRE:
	SK	PO POŽITÍ:
	SL	PRI ZAUŽITJU:
	FI	JOS KEMIKAALIA ON NIELTY:
	SV	VID FÖRTÄRING:

P302	Language	
	BG	
	ES	EN CASO DE CONTACTO CON LA PIEL:
	CS	P•I STYKU S K•ŽÍ:
	DA	VED KONTAKT MED HUDEN:
	DE	BEI BERÜHRUNG MIT DER HAUT:
	ET	NAHALE SATTUMISE KORRAL:

P302	Language	
	EL	
	EN	IF ON SKIN:
	FR	EN CAS DE CONTACT AVEC LA PEAU:
	GA	I gCÁS TEAGMHÁLA LEIS AN gCRAICEANN:
	IT	IN CASO DI CONTATTO CON LA PELLE:
	LV	SASKAR• AR • DU:
	LT	PATEKUS ANT ODOS:
	HU	HA B• RRE KERÜL:
	MT	F'KA• TA' KUNTATT MAL-• ILDA:
	NL	BIJ CONTACT MET DE HUID:
	PL	W PRZYPADKU KONTAKTU ZE SKÓR• :
	PT	SE ENTRAR EM CONTACTO COM A PELE:
	RO	ÎN CAZ DE CONTACT CU PIELEA:
	SK	PRI KONTAKTE S POKOŽKOU:
	SL	PRI STIKU S KOŽO:
	FI	JOS KEMIKAALIA JOUTUU IHOLLE:
	SV	VID HUDKONTAKT:

P303	Language	
	BG	•••••••••••••••••••••••• (••••••••••):
	ES	EN CASO DE CONTACTO CON LA PIEL (o el pelo):
	CS	P•I STYKU S K• ŽÍ (nebo s vlasy):
	DA	VED KONTAKT MED HUDEN (eller håret):
	DE	BEI BERÜHRUNG MIT DER HAUT (oder dem Haar):
	ET	NAHALE (või juuste) SATTUMISE KORRAL:
	EL	••••
	EN	IF ON SKIN (or hair):
	FR	EN CAS DE CONTACT AVEC LA PEAU (ou les cheveux):
	GA	I gCÁS TEAGMHÁLA LEIS AN gCRAICEANN (nó le gruaig):
	IT	IN CASO DI CONTATTO CON LA PELLE (o con i capelli):
	LV	SASKAR• AR • DU (vai matiem):
	LT	PATEKUS ANT ODOS (arba plauk•):
	HU	HA B• RRE (vagy hajra) KERÜL:
	MT	F'KA• TA' KUNTATT MAL-• ILDA (jew ix-xag•ar):
	NL	BIJ CONTACT MET DE HUID (of het haar):

P303	Language	
	PL	W PRZYPADKU KONTAKTU ZE SKÓR• (lub z w•osami):
	PT	SE ENTRAR EM CONTACTO COM A PELE (ou o cabelo):
	RO	ÎN CAZ DE CONTACT CU PIELEA (sau p•rul):
	SK	PRI KONTAKTE S POKOŽKOU (alebo vlasmi):
	SL	PRI STIKU S KOŽO (ali lasmi):
	FI	JOS KEMIKAALIA JOUTUU IHOLLE (tai hiuksiin):
	SV	VID HUDKONTAKT (även håret):

P304	Language	
	BG	••• :
	ES	EN CASO DE INHALACIÓN:
	CS	P•I VDECHNUTÍ:
	DA	VED INDÅNDING:
	DE	BEI EINATMEN:
	ET	SISSEHINGAMISE KORRAL:
	EL	
	EN	IF INHALED:
	FR	EN CAS D'INHALATION:
	GA	MÁ IONANÁLAÍTEAR:
	IT	IN CASO DI INALAZIONE:
	LV	IEELPOJOT:
	LT	•KV•PUS:
	HU	BELÉLEGZÉS ESETÉN:
	MT	JEKK JIN•IBED MAN-NIFS:
	NL	NA INADEMING:
	PL	W PRZYPADKU DOSTANIA SI• DO DRÓG ODDECHOWYCH:
	PT	EM CASO DE INALAÇÃO:
	RO	ÎN CAZ DE INHALARE:
	SK	PO VDÝCHNUTÍ:
	SL	PRI VDIHAVANJU:
	FI	JOS KEMIKAALIA ON HENGITETTY:
	SV	VID INANDNING:

P305	Language	
	BG	
	ES	EN CASO DE CONTACTO CON LOS OJOS:
	CS	P•I ZASAŽENÍ O•Í:
	DA	VED KONTAKT MED ØJNENE:
	DE	BEI KONTAKT MIT DEN AUGEN:
	ET	SILMA SATTUMISE KORRAL:
	EL	
	EN	IF IN EYES:
	FR	EN CAS DE CONTACT AVEC LES YEUX:
	GA	I gCÁS TEAGMHÁLA LEIS NA SÚILE:
	IT	IN CASO DI CONTATTO CON GLI OCCHI:
	LV	IEK••STOT AC•S:
	LT	PATEKUS • AKIS:
	HU	SZEMBE KERÜLÉS ESETÉN:
	MT	JEKK JID•OL FL-G•AJNEJN:
	NL	BIJ CONTACT MET DE OGEN:
	PL	W PRZYPADKU DOSTANIA SI• DO OCZU:
	PT	SE ENTRAR EM CONTACTO COM OS OLHOS:
	RO	ÎN CAZ DE CONTACT CU OCHII:
	SK	PO ZASIAHNUTÍ O•Í:
	SL	PRI STIKU Z O•MI:
	FI	JOS KEMIKAALIA JOUTUU SILMIIN:
	SV	VID KONTAKT MED ÖGONEN:

P306	Language	
	BG	
	ES	EN CASO DE CONTACTO CON LA ROPA:
	CS	P•I STYKU S OD•VEM:
	DA	VED KONTAKT MED TØJET:
	DE	BEI KONTAMINIERTER KLEIDUNG:
	ET	RÕIVASTELE SATTUMISE KORRAL:
	EL	
	EN	IF ON CLOTHING:
	FR	EN CAS DE CONTACT AVEC LES VÊTEMENTS:
	GA	I gCÁS TEAGMHÁLA LE hÉADAÍ:

P306	Language	
	IT	IN CASO DI CONTATTO CON GLI INDUMENTI:
	LV	SASKAR• AR AP••RBU:
	LT	PATEKUS ANT DRABUŽI••:
	HU	HA RUHÁRA KERÜL:
	MT	F'KA• TA' KUNTATT MA' L-ILBIES:
	NL	NA MORSEN OP KLEDING:
	PL	W PRZYPADKU KONTAKTU Z ODZIE••:
	PT	SE ENTRAR EM CONTACTO COM A ROUPA:
	RO	ÎN CAZ DE CONTACT CU ÎMBR•C•MINTEA:
	SK	PRI KONTAKTE S ODEVOM:
	SL	PRI STIKU Z OBLA•ILI:
	FI	JOS KEMIKAALIA JOUTUU VAATTEISIIN:
	SV	VID KONTAKT MED KLÄDERNA:

P307	Language	
	BG	••• :
	ES	EN CASO DE exposición:
	CS	P•I expozici:
	DA	VED eksponering:
	DE	BEI Exposition:
	ET	Kokkupuute korral:
	EL	
	EN	IF exposed:
	FR	EN CAS d'exposition:
	GA	I gCÁS nochta:
	IT	IN CASO di esposizione:
	LV	JA saskaras:
	LT	Esant s•ly•iui:
	HU	Expozíció esetén:
	MT	JEKK espost:
	NL	NA blootstelling:
	PL	W PRZYPADKU nara•enia:
	PT	EM CASO DE exposição:
	RO	ÎN CAZ DE expunere:
	SK	PO expozícii:

P307	Language	
	SL	PRI izpostavljenosti:
	FI	Altistumisen tapahduttua:
	SV	Om du exponerats:

P308	Language	
	BG	••• :
	ES	EN CASO DE exposición manifiesta o presunta:
	CS	P•I expozici nebo podez•ení na ni:
	DA	VED eksponering eller mistanke om eksponering:
	DE	BEI Exposition oder falls betroffen
	ET	Kokkupuute või kokkupuutekahtluse korral:
	EL	
	EN	IF exposed or concerned:
	FR	EN CAS d'exposition prouvée ou suspectée:
	GA	I gCÁS nochta nó má mheastar a bheith nochtaithe:
	IT	IN CASO di esposizione o di possibile esposizione:
	LV	Ja saskaras vai saist•ts ar:
	LT	Esant s•ly•iui arba jeigu numanomas s•lytis:
	HU	Expozíció vagy annak gyanúja esetén:
	MT	JEKK espost jew kon•ernat:
	NL	NA (mogelijke) blootstelling:
	PL	W PRZYPADKU nara•enia lub styczno•ci:
	PT	EM CASO DE exposição ou suspeita de exposição:
	RO	ÎN CAZ DE expunere sau de posibil• expunere:
	SK	Po expozícii alebo podozrení z nej:
	SL	PRI izpostavljenosti ali sumu izpostavljenosti:
	FI	Altistumisen tapahduttua tai jos epäillään altistumista:
	SV	Vid exponering eller misstanke om exponering:

P309	Language	
	BG	••• ••• :
	ES	EN CASO DE exposición o malestar:
	CS	P•I expozici nebo necítíte-li se dob•e:
	DA	VED eksponering eller ubehag:

	DE	BEI Exposition oder Unwohlsein:
	ET	Kokkupuute või halva enesetunde korral:
	EL	
	EN	IF exposed or if you feel unwell:
	FR	EN CAS d'exposition ou d'un malaise:
	GA	I gCÁS nochta nó má bhraitear tinn:
	IT	IN CASO di esposizione o di malessere:
	LV	JA saskaras vai ja jums ir slikta pašsaj•ta:
	LT	Esant s•ly•iui arba blogai pasijutus:
	HU	Expozíció vagy rosszullét esetén:
	MT	JEKK espost jew t•ossok ma tifla•x:
	NL	NA blootstelling of bij onwel voelen:
	PL	W PRZYPADKU nara•enia lub z•ego samopoczucia:
	PT	EM CASO DE exposição ou de indisposição:
	RO	ÎN CAZ DE expunere sau dac• nu v• sim•i•i bine:
	SK	Po expozícii alebo pri zdravotných problémoch.
	SL	PRI izpostavljenosti ali slabem po•utju:
	FI	Altistumisen tapahduttua tai jos ilmenee pahoinvointia:
	SV	Vid exponering eller obehag:

P310	Language	
	BG	.....
	ES	Llamar inmediatamente a un CENTRO DE INFORMACION TOXICOLOGICA o a un médico.
	CS	Okamžit• volejte TOXIKOLOGICKÉ INFORMA•NÍ ST•EDISKO nebo léka•e.
	DA	Ring omgående til en GIFTINFORMATION eller en læge.
	DE	Sofort GIFTINFORMATIONSZENTRUM oder Arzt anrufen.
	ET	Võtta viivitamata ühendust MÜRGIKUSTEABEKESKUSE või arstiga.
	EL	••
	EN	Immediately call a POISON CENTER or doctor/physician.
	FR	Appeler immédiatement un CENTRE ANTIPOISON ou un médecin.
	GA	Cuir glao láithreach ar IONAD NIMHE nó ar dhochtúir/lia.
	IT	Contattare immediatamente un CENTRO ANTIVELENI o un medico.

P312	Language	
	HU	Roszsullét esetén forduljon TOXIKOLÓGIAI KÖZPONTHOZ vagy orvoshoz.
	MT	Ikkuntattja • ENTRU TA' L-AVVELENAMENT jew tabib jekk t•ossok ma tifla•x.
	NL	Bij onwel voelen een ANTIGIFCENTRUM of een arts raadplegen.
	PL	W przypadku z•ego samopoczucia skontaktowa• si• z O•RODKIEM ZATRU• lub z lekarzem.
	PT	Caso sinta indisposição, contacte um CENTRO DE INFORMAÇÃO ANTIVENENOS ou um médico.
	RO	Suna•i la un CENTRU DE INFORMARE TOXICOLOGIC• sau un medic, dac• nu v• sim•i•i bine.
	SK	Pri zdravotných problémoch, volajte NÁRODNÉ TOXIKOLOGICKÉ INFORMA•NÉ CENTRUM alebo lekára.
	SL	Ob slabem po•utju pokli•ite CENTER ZA ZASTRUPITVE ali zdravnika.
	FI	Ota yhteys MYRKYTYSTIETOKESKUKSEEN tai lääkäriin, jos ilmenee pahoinvointia.
	SV	Vid obehag, kontakta GIFTINFORMATIONSCENTRAL eller läkare.

P313	Language	
	BG	• • • • • • • •
	ES	Consultar a un médico.
	CS	Vyhledejte lékařskou pomoc/ošetření.
	DA	Søg lægehjælp.
	DE	Ärztlichen Rat einholen / ärztliche Hilfe hinzuziehen.
	ET	Pöörduda arsti poole.
	EL	
	EN	Get medical advice/attention.
	FR	Consulter un médecin.
	GA	Faigh comhairle/cúram liachta.
	IT	Consultare un medico.
	LV	L•dziet pal•dz•bu medi•iem.
	LT	Kreiptis • gydytoj•.
	HU	Orvosi ellátást kell kérni.
	MT	Ikkonsulta tabib.
	NL	Een arts raadplegen.

P313	Language	
	PL	Zasi•gn•• porady/zg•osi• si• pod opiek• lekarza.
	PT	Consulte um médico.
	RO	Consulta•i medicul.
	SK	Vyh•adajte lekársku pomoc/starostlivos•.
	SL	Poiš•ite zdravniško pomo•/oskrbo.
	FI	Hakeudu lääkäriin.
	SV	Sök läkarhjälp.

P314	Language	
	BG	• /..... .
	ES	Consultar a un médico en caso de malestar.
	CS	Necítíte-li se dob•e, vyhledejte léka•skou pomoc/ošet•ení.
	DA	Søg lægehjælp ved ubehag.
	DE	Bei Unwohlsein ärztlichen Rat einholen / ärztliche Hilfe hinzuziehen.
	ET	Halva enesetunde korral pöörduda arsti poole.
	EL	
	EN	Get medical advice/attention if you feel unwell.
	FR	Consulter un médecin en cas de malaise.
	GA	Faigh comhairle/cúram liachta má bhraitheann tú tinn.
	IT	In caso di malessere, consultare un medico.
	LV	L•dziet pal•dz•bu medi•iem, ja jums ir slikta pašsaj•ta.
	LT	Pasijutus blogai, kreiptis •gydytoj•.
	HU	Roszzullét esetén orvosi ellátást kell kérni.
	MT	Ikkonsulta tabib jekk t•ossok ma tifla•x.
	NL	Bij onwel voelen een arts raadplegen.
	PL	W przypadku z•ego samopoczucia zasi•gn•• porady/zg•osi• si• pod opiek• lekarza.
	PT	Em caso de indisposição, consulte um médico.
	RO	Consulta•i medicul, dac• nu v• sim•i•i bine.
	SK	Ak poci•ujete zdravotné problémy, vyh•adajte lekársku pomoc/starostlivos•.
	SL	Ob slabem po•utju poiš•ite zdravniško pomo•/oskrbo.
	FI	Hakeudu lääkäriin, jos ilmenee pahoinvointia.
	SV	Sök läkarhjälp vid obehag.

P315	Language	
	BG /..... .
	ES	Consultar a un médico inmediatamente.
	CS	Okamžit• vyhledejte léka•skou pomoc/ošet•ení.
	DA	Søg omgående lægehjælp.
	DE	Sofort ärztlichen Rat einholen / ärztliche Hilfe hinzuziehen.
	ET	Pöörduda viivitamata arsti poole.
	EL	
	EN	Get immediate medical advice/attention.
	FR	Consulter immédiatement un médecin.
	GA	Faigh comhairle/cúram liachta láithreach.
	IT	Consultare immediatamente un medico.
	LV	Nekav•joties l•dziet pal•dz•bu medi•iem.
	LT	Nedelsiant kreiptis • gydytoj•.
	HU	Azonnal orvosi ellátást kell kérni.
	MT	Ikkonsulta tabib minnufih.
	NL	Onmiddellijk een arts raadplegen.
	PL	Natychmiast zasi•gn•• porady/zg•osi• si• pod opiek• lekarza.
	PT	Consulte imediatamente um médico.
	RO	Consulta•i imediat medicul.
	SK	Okamžite vyh•adajte lekársku pomoc/starostlivos•.
	SL	Takoj poiš•ite zdravniško pomo•/oskrbo.
	FI	Hakeudu välittömästi lääkäriin.
	SV	Sök omedelbart läkarhjälp.

P320	Language	
	BG (•• ... •••••).
	ES	Se necesita urgentemente un tratamiento específico (ver ... en esta etiqueta).
	CS	Je nutné odborné ošet•ení (viz ... na tomto štítku).
	DA	Særlig behandling straks påkrævet (se ... på denne etiket).
	DE	Besondere Behandlung dringend erforderlich (siehe ... auf diesem Kennzeichnungsetikett).
	ET	Nõuab viivitamatut eriravi (vt ... käesoleval etiketil).
	EL	
	EN	Specific treatment is urgent (see ... on this label).

P320	Language	
	FR	Un traitement spécifique est urgent (voir ... sur cette étiquette).
	GA	Tá sé práinneach go bhfaightear cóir leighis ar leith (féach ... ar an lipéad seo).
	IT	Trattamento specifico urgente (vedere su questa etichetta).
	LV	Steidzami nepieciešama •paša medic•nisk• pal•dz•ba (skat. ... uz š•s eti•etes).
	LT	B•tinas skubus specialus gydymas (žr. ... šioje etiket•je).
	HU	Sürg•s szakellátás szükséges (lásd ... a címkén).
	MT	Trattament spe•ifiku hu ur•enti (ara ... fuq din it-tikketta).
	NL	Specifieke behandeling dringend vereist (zie ... op dit etiket).
	PL	Pilnie zastosowa• okre•lone leczenie (patrz ... na etykięcie).
	PT	É urgente um tratamento específico (ver ... no presente rótulo).
	RO	Un tratament specific este urgent (a se vedea ... de pe acest• etichet•).
	SK	Odborné ošetrenie je naliehavé (pozri ... na etikete).
	SL	Posebno zdravljenje je nujno (glejte ... na tej etiketi).
	FI	Eriyishoitoa tarvitaan välittömästi (katso ... pakkauksen merkinnöissä).
	SV	Särskild behandling krävs omedelbart (se ... på etiketten).

P321	Language	
	BG (•• ... ••).
	ES	Se necesita un tratamiento específico (ver ... en esta etiqueta).
	CS	Odborné ošet•ení (viz ... na tomto štítku).
	DA	Særlig behandling (se ... på denne etiket).
	DE	Besondere Behandlung (siehe ... auf diesem Kennzeichnungsetikett).
	ET	Nõuab eriravi (vt ... käesoleval etiketil).
	EL	
	EN	Specific treatment (see ... on this label).
	FR	Traitement spécifique (voir ... sur cette étiquette).
	GA	Cóir liachta ar leith (féach ... ar an lipéad seo).
	IT	Trattamento specifico (vedere .....su questa etichetta).
	LV	•paša medic•nisk• pal•dz•ba (skat. ... uz š•s eti•etes).
	LT	Specialus gydymas (žr. ... šioje etiket•je).
	HU	Szakellátás (lásd ... a címkén).
	MT	Trattament spe•ifiku (ara ... fuq din it-tikketta).

P321	Language	
	NL	Specifieke behandeling vereist (zie ... op dit etiket).
	PL	Zastosowa• okre•lone leczenie (patrz ... na etykiecie).
	PT	Tratamento específico (ver ... no presente rótulo).
	RO	Tratament specific (a se vedea ... de pe aceast• etichet•).
	SK	Odborné ošetrenie (pozri ... na etikete).
	SL	Posebno zdravljenje (glejte ... na tej etiketi).
	FI	Eriyishoitoa tarvitaan (katso ... pakkauksen merkinnössä).
	SV	Särskild behandling (se ... på etiketten).

P322	Language	
	BG	••••• (•• ... ••••••••••••).
	ES	Se necesitan medidas específicas (ver ... en esta etiqueta).
	CS	Specifické opat•ení (viz ... na tomto štítku).
	DA	Særlige foranstaltninger (se ... på denne etiket).
	DE	Gezielte Maßnahmen (siehe ... auf diesem Kennzeichnungsetikett).
	ET	Nõuab erimeetmeid (vt ... käesoleval etiketil).
	EL	
	EN	Specific measures (see ... on this label).
	FR	Mesures spécifiques (voir ... sur cette étiquette).
	GA	Bearta ar leith (féach ... ar an lipéad seo).
	IT	Misure specifiche (vedere .....su questa etichetta).
	LV	•paši pas•kumi (skat. ... uz š•s eti•etes).
	LT	Specialios priemon•s (žr. ... šioje etiket•je).
	HU	Különleges intézkedések (lásd ... a címkén).
	MT	Mi•uri spe•ifi•i (ara ... fuq din it-tikketta).
	NL	Specifieke maatregelen (zie ... op dit etiket).
	PL	•rodki szczególne (patrz ... na etykiecie).
	PT	Medidas específicas (ver ... no presente rótulo).
	RO	M•suri specifice (a se vedea ... de pe aceast• etichet•).
	SK	Osobitné opatrenia (pozri ... na etikete).
	SL	Posebni ukrepi (glejte ... na tej etiketi).
	FI	Eriyistoimenpiteitä tarvitaan (katso ... pakkauksen merkinnössä).
	SV	Särskilda åtgärder (se ... på etiketten).

P330	Language	
	BG	••• ••••••.
	ES	Enjuagarse la boca.
	CS	Vypláchn•te ústa.
	DA	Skyl munden.
	DE	Mund ausspülen.
	ET	Loputada suud.
	EL	
	EN	Rinse mouth.
	FR	Rincer la bouche.
	GA	Sruthlaítear an béal.
	IT	Sciacquare la bocca.
	LV	Izskalot muti.
	LT	Išskalauti burn•.
	HU	A szájat ki kell öblíteni.
	MT	La•la• •alqek.
	NL	De mond spoelen.
	PL	Wyp•uka• usta.
	PT	Enxaguar a boca.
	RO	Cl•ti•i gura.
	SK	Vypláchnite ústa.
	SL	Izprati usta.
	FI	Huuhdo suu.
	SV	Skölj munnen.

P331	Language	
	BG	••
	ES	NO provocar el vómito.
	CS	NEVYVOLÁVEJTE zvracení.
	DA	Fremkald IKKE opkastning.
	DE	KEIN Erbrechen herbeiführen.
	ET	MITTE kutsuda esile oksendamist.
	EL	
	EN	Do NOT induce vomiting.
	FR	NE PAS faire vomir.
	GA	NÁ spreagtar urlacan.

P331	Language	
	IT	NON provocare il vomito.
	LV	NEIZRAIS•T vemšanu.
	LT	NESKATINTI v•mimo.
	HU	TILOS hánytatni.
	MT	TIPPROVOKAX ir-remettar.
	NL	GEEN braken opwekken.
	PL	NIE wywo•ywa• wymiotów.
	PT	NÃO provocar o vômito.
	RO	NU provoca•i voma.
	SK	Nevyvolávajte zvracanie.
	SL	NE izzvati bruhanja.
	FI	Ei saa oksennuttaa.
	SV	Framkalla INTE kräkning.

P332	Language	
	BG	••••••••••••••••••••••••••••••••:
	ES	En caso de irritación cutánea:
	CS	P•i podrážd•ní k•že:
	DA	Ved hudirritation:
	DE	Bei Hautreizung:
	ET	Nahaärrituse korral:
	EL	•••••:
	EN	If skin irritation occurs:
	FR	En cas d'irritation cutanée:
	GA	I gcás greannú craicinn:
	IT	In caso di irritazione della pelle:
	LV	Ja rodas •das iekaisums:
	LT	Jeigu sudirginama oda:
	HU	B•riritáció esetén:
	MT	Jekk ikun hemm irritazzjoni tal-•ilda:
	NL	Bij huidirritatie:
	PL	W przypadku wyst•pienia podra•nienia skóry:
	PT	Em caso de irritação cutânea:
	RO	În caz de iritare a pielii:
	SK	Ak sa prejaví podráždenie pokožky:

P335	Language	
	MT	Farfar il-frak mhux imwa••la minn fuq il-•ilda.
	NL	Losse deeltjes van de huid afvegen.
	PL	Nie zwi•zan• pozosta•o•• strzepn•• ze skóry.
	PT	Sacudir da pele as partículas soltas.
	RO	Îndep•rta•i particulele depuse pe piele.
	SK	Z pokožky oprášte sypké •lasto•ky.
	SL	S krta•o odstraniti razsute delce s kože.
	FI	Poista irtohiukkaset iholta.
	SV	Borsta bort lösa partiklar från huden.

P336	Language	
	BG	..........
	ES	Descongelar las partes heladas con agua tibia. No frotar la zona afectada.
	CS	Omrzlá místa ošet•ete vlažnou vodou. Postižené místo net•ete.
	DA	Forsigtig opvarmning af frostskaadede legemsdele i lunkent vand. Gnid ikke det angrebne område.
	DE	Vereiste Bereiche mit lauwarmem Wasser auftauen. Betroffenen Bereich nicht reiben.
	ET	Sulatada külmunud piirkonnad leige veega. Kannatada saanud piirkonda mitte hõõruda.
	EL	• • •
	EN	Thaw frosted parts with lukewarm water. Do no rub affected area.
	FR	Dégeler les parties gelées avec de l'eau tiède. Ne pas frotter les zones touchées.
	GA	Leáigh codanna sioctha le huisce alabhog. Ná cuimil an réimse lena mbaineann.
	IT	Sgelare le parti congelate usando acqua tiepida. Non sfregare la parte interessata.
	LV	Atkaus•t sasaluš•s da•as ar remdenu •deni. Skarto zonu neberzt.
	LT	Prišalusias daleles atitirpinti drungnu vandeniui. Netrinti paveiktos zonos.
	HU	A fagyott részeket langyos vízzel fel kell melegíteni. Tilos az érintett terület dörzsölése.
	MT	•oll il-partijiet kies•a bl-ilma fietel. Tog•rokx il-parti affettwata.

P338	Language	
	PT	Se usar lentes de contacto, retire-as, se tal lhe for possível. Continue a enxaguar.
	RO	Scoate•i lentilele de contact, dac• este cazul •i dac• acest lucru se poate face cu u•urin••. Continua•i s• cl•ti•i.
	SK	Ak používate kontaktné šošovky a ak je to možné, odstrá•te ich. Pokra•ujte vo vyplachovaní.
	SL	Odstranite kontaktne le•e, •e jih imate in •e to lahko storite brez težav. Nadaljujte z izpiranjem.
	FI	Poista piilolinssit, jos sen voi tehdä helposti. Jatka huuhtomista.
	SV	Ta ur eventuella kontaktlinser om det går lätt. Fortsätt att skölja.

P340	Language	
	BG	•••••••• •••••••••••••••••• ••••••••,
	ES	Transportar a la víctima al exterior y mantenerla en reposo en una posición confortable para respirar.
	CS	P•eneste postiženého na •erstvý vzduch a ponechte jej v klidu v poloze usnad•ující dýchání.
	DA	Flyt personen til et sted med frisk luft og sørg for, at vedkommende hviler i en stilling, som letter vejrtrækningen.
	DE	Die betroffene Person an die frische Luft bringen und in einer Position ruhigstellen, die das Atmen erleichtert.
	ET	Toimetada kannatanu värske õhu kätte ja asetada mugavasse puhkeasendisse, mis võimaldab kergesti hingata.
	EL	•••••
	EN	Remove victim to fresh air and keep at rest in a position comfortable for breathing.
	FR	Transporter la victime à l'extérieur et la maintenir au repos dans une position où elle peut confortablement respirer.
	GA	Tabhair amach faoin aer an duine agus coimeád socair é, i riocht ina bhféadfaidh sé anáil a tharraingt go réidh.
	IT	Trasportare l'infortunato all'aria aperta e mantenerlo a riposo in posizione che favorisca la respirazione.
	LV	Izvest cietušo svaig• gais• un tur•t miera st•vokl•, lai b•tu •rti elpot.
	LT	Išnešti nukent•jus•j• •gryn• or•; jam b•tina ramyb• ir pad•tis, leidžianti laisvai kv•puoti.
	HU	Az érintett személyt friss leveg•re kell vinni és olyan nyugalmi testhelyzetbe kell helyezni, hogy könnyen tudjon lélegezni.

P341	Language	
	FR	S'il y a difficulté à respirer, transporter la victime à l'extérieur et la maintenir au repos dans une position où elle peut confortablement respirer.
	GA	Más deacair don duine análú, tabhair amach faoin aer é agus coimeád socair é, i riocht ina bhféadfaidh sé anál a tharraingt go réidh.
	IT	Se la respirazione è difficile, trasportare l'infortunato all'aria aperta e mantenerlo a riposo in posizione che favorisca la respirazione.
	LV	Ja elpošana ir apgr•tin•ta, izvest cietušo svaig• gais• un tur•t miera st•vokl•, lai b•tu •rti elpot.
	LT	Jeigu nukent•jusiam sunku kv•puoti, išnešti j•• gryn• or• ; jam b•tina ramyb• ir pad•tis, leidžianti laisvai kv•puoti.
	HU	Légzési nehézségek esetén az érintett személyt friss leveg•re kell vinni és olyan nyugalmi testhelyzetbe kell helyezni, hogy könnyen tudjon lélegezni.
	MT	Jekk in-nifs ikun diffi•li, esponi lill-vittma g•all-arja friska u •ommha mistrie•a f'po•izzjoni komda biex tkun tista' tie•u n-nifs.
	NL	Bij ademhalingsmoeilijkheden het slachtoffer in de frisse lucht brengen en laten rusten in een houding die het ademen vergemakkelijkt.
	PL	W przypadku trudno•ci z oddychaniem, wyprowadzi• lub wynie•• poszkodowanego na •wie•e powietrze i zapewni• warunki do odpoczynku w pozycji umo•liwiaj•cej swobodne oddychanie.
	PT	Em caso de dificuldade respiratória, retirar a vítima para uma zona ao ar livre e mantê-la em repouso numa posição que não dificulte a respiração.
	RO	Dac• respira•ia este dificil•, transporta•i victima la aer liber •i men•ine•i-o în stare de repaus într-o pozi•ie confortabil• pentru respira•ie.
	SK	Ak nastanú •ažkosti s dýchaním, presu•te postihnutého na •erstvý vzduch a nechajte ho oddychova• v polohe, ktorá mu umožní pohodlné dýchanie.
	SL	Pri oteženem dihanju prenesti žrtev na svež zrak in jo pustiti po•ivati v položaju, ki olajša dihanje.
	FI	Jos hengitysvaikeuksia, siirrä henkilö raittiiseen ilmaan ja pidä lepoasennossa, jossa on helppo hengittää.
	SV	Vid andningsbesvär, flytta personen till frisk luft och se till att han eller hon vilar i en ställning som underlättar andningen.

P342	Language	
	BG	•••••••••••••••••••• ••••••••••••

P342	Language	
	ES	En caso de síntomas respiratorios:
	CS	Při dýchacích potížích:
	DA	Ved luftvejssymptomer:
	DE	Bei Symptomen der Atemwege:
	ET	Hingamisteede probleemide ilmnemise korral:
	EL	
	EN	If experiencing respiratory symptoms:
	FR	En cas de symptômes respiratoires:
	GA	I gcás siomptóm riospráide:
	IT	In caso di sintomi respiratori:
	LV	Ja rodas elpošanas traucējumu simptomi:
	LT	Jeigu pasireiškia respiraciniai simptomai:
	HU	Légzési problémák esetén:
	MT	Jekk tkun qed tbat i minn sintomi respiratorji:
	NL	Bij ademhalings symptomen:
	PL	W przypadku wystąpienia objawów ze strony układu oddechowego:
	PT	Em caso de sintomas respiratórios:
	RO	În caz de simptome respiratorii:
	SK	Pri sťaženiach dýchania:
	SL	Pri respiratornih simptomih:
	FI	Jos ilmenee hengitysoireita:
	SV	Vid besvär i luftvägarna:

P350	Language	
	BG	
	ES	Lavar suavemente con agua y jabón abundantes.
	CS	Jemně omyjte velkým množstvím vody a mýdla.
	DA	Vask forsigtigt med rigeligt sæbe og vand.
	DE	Behutsam mit viel Wasser und Seife waschen.
	ET	Pesta õrnalt rohke vee ja seebiga.
	EL	
	EN	Gently wash with plenty of soap and water.
	FR	Laver avec précaution et abondamment à l'eau et au savon.
	GA	Nigh go bog le neart gallúnaí agus uisce.

	IT	Lavare delicatamente e abbondantemente con acqua e sapone.
	LV	Maigi izskalot ar lielu daudzumu ziep•m un •deni.
	LT	Atsargiai nuplauti dideliu kiekiu muilo ir vandens.
	HU	Óvatos lemosás b• szappanos vízzel.
	MT	A•sel bil-mod b'•afna sapun u ilma.
	NL	Voorzichtig wassen met veel water en zeep.
	PL	Delikatnie umy• du•• ilo•ci• wody z myd•em.
	PT	Lavar suavemente com sabonete e água abundantes.
	RO	Sp•la•i u•or cu mult• ap• •i s•pun.
	SK	Opatrne umyte ve•kým množstvom vody a mydla.
	SL	Nežno umiti z veliko mila in vode.
	FI	Pese varovasti runsaalla vedellä ja saippualla.
	SV	Tvätta försiktigt med mycket tvål och vatten.

P351	Language	
	BG	•• •••••• ••••••••••
	ES	Aclarar cuidadosamente con agua durante varios minutos.
	CS	N•kolik minut opatr• oplachujte vodou.
	DA	Skyl forsigtigt med vand i flere minutter.
	DE	Einige Minuten lang behutsam mit Wasser ausspülen.
	ET	Loputada mitme minuti jooksul ettevaatlikult veega.
	EL	
	EN	Rinse cautiously with water for several minutes.
	FR	Rincer avec précaution à l'eau pendant plusieurs minutes.
	GA	Sruthlaítear go faichilleach le huisce ar feadh roinnt nóiméad.
	IT	Sciacquare accuratamente per parecchi minuti.
	LV	Uzman•gi skalot ar •deni vair•kas min•tes.
	LT	Atsargiai plauti vandeniū kelias minutes.
	HU	Óvatos öblítés vízzel több percen keresztül.
	MT	La•la• b'attenzjoni bl-ilma g•al diversi minuti.
	NL	Voorzichtig afspoelen met water gedurende een aantal minuten.
	PL	Ostro•nie p•uka• wod• przez kilka minut.
	PT	Enxaguar cuidadosamente com água durante vários minutos.
	RO	Cl•ti•i cu aten•ie cu ap•, timp de mai multe minute.
	SK	Opatrne nieko•ko minút oplachujte vodou.

P351	Language	
	SL	Previdno izpirati z vodo nekaj minut.
	FI	Huuhto huolellisesti vedellä usean minuutin ajan.
	SV	Skölj försiktigt med vatten i flera minuter.

P352	Language	
	BG	
	ES	Lavar con agua y jabón abundantes.
	CS	Omyjte velkým množstvím vody a mýdla.
	DA	Vask med rigeligt sæbe og vand.
	DE	Mit viel Wasser und Seife waschen.
	ET	Pesta rohke vee ja seebiga.
	EL	
	EN	Wash with plenty of soap and water.
	FR	Laver abondamment à l'eau et au savon.
	GA	Nigh le neart gallúnaí agus uisce.
	IT	Lavare abbondantemente con acqua e sapone.
	LV	Mazgāt ar lielu daudzumu ziepam un deni.
	LT	Plauti dideliu kiekio muilo ir vandens.
	HU	Lemosás bősáppanos vízzel.
	MT	Afna b'sapun u ilma.
	NL	Met veel water en zeep wassen.
	PL	Umyć dużo wody z mydłem.
	PT	Lavar com sabonete e água abundantes.
	RO	Spălați cu multă apă și săpun.
	SK	Umyte veľkým množstvom vody a mýdla.
	SL	Umiti z veliko mila in vode.
	FI	Pese runsaalla vedellä ja saippualla.
	SV	Tvätta med mycket tvål och vatten.

P353	Language	
	BG/..... .
	ES	Aclararse la piel con agua/ducharse.
	CS	Opláchněte kůži vodou/osprchujte.
	DA	Skyl/brus huden med vand.
	DE	Haut mit Wasser abwaschen/duschen.

P353	Language	
	ET	Loputada nahka veega/loputada duši all.
	EL	
	EN	Rinse skin with water/shower.
	FR	Rincer la peau à l'eau/se doucher.
	GA	Sruthlaítear an craiceann le huisce/glac cithfholcadh.
	IT	Sciacquare la pelle/fare una doccia.
	LV	Noskalot •du ar •deni/ duš•.
	LT	Od• nuplauti vandeniu/•iurkšle.
	HU	A b•rt le kell öblíteni vízzel/zuhanyozás.
	MT	La•la• il-•ilda bl-ilma/bix-xawer.
	NL	Huid met water afspoelen/afdouchen.
	PL	Sp•uka• skór• pod strumieniem wody/prysznicem.
	PT	Enxaguar a pele com água/tomar um duche.
	RO	Cl•ti•i pielea cu ap•/face•i du•.
	SK	Pokožku opláchnite vodou/sprchou.
	SL	Kožo izprati z vodo/prho.
	FI	Huuhdo/suihkuta iho vedellä.
	SV	Skölj huden med vatten/duscha.

P360	Language	
	BG,
	ES	Aclarar inmediatamente con agua abundante las prendas y la piel contaminadas antes de quitarse la ropa.
	CS	Kontaminovaný od•v a k•ži okamžit• omyjte velkým množstvím vody a potom od•v odložte.
	DA	Skyl omgående tilsmudset tøj og hud med rigeligt vand, før tøjet fjernes.
	DE	Kontaminierte Kleidung und Haut sofort mit viel Wasser abwaschen und danach Kleidung ausziehen.
	ET	Saastunud rõivad ja nahk loputada viivitamata rohke veega ning alles seejärel rõivad eemaldada.
	EL	
	EN	Rinse immediately contaminated clothing and skin with plenty of water before removing clothes.

P360	Language	
	FR	Rincer immédiatement et abondamment avec de l'eau les vêtements contaminés et la peau avant de les enlever.
	GA	Sruthlaítear éadaí éillithe agus an craiceann láithreach le neart uisce sula mbaineann an duine na héadaí de.
	IT	Sciacquare immediatamente e abbondantemente gli indumenti contaminati e la pelle prima di togliersi gli indumenti.
	LV	Nekav•joties noskalot pies•r•oto ap••rbu un skarto •du ar lielu daudzumu •dens pirms ap••rba novilkšanas.
	LT	Prieš nuvelkant užterštus drabužius, nedelsiant juos ir od• nuplauti dideliu kiekiu vandens.
	HU	A ruhák levetése el•tt a szennyezett ruházatot és a b•rt b• vízzel azonnal le kell öblíteni.
	MT	La•la• mall-ewwel l-ilbies ikkontaminat u l•ilda b'•afna ilma gabel ma tne••i l-ilbies.
	NL	Verontreinigde kleding en huid onmiddellijk met veel water afspoelen en pas daarna kleding uittrekken.
	PL	Natychmiast sp•uka• zanieczyszczon• odzie• i skór• du•• ilo•ci• wody przed zdj•ciem odzie•y.
	PT	Enxaguar imediatamente com muita água a roupa e a pele contaminadas antes de se despir.
	RO	Cl•ti•i imediat îmbr•c•mintea contaminat• •i pielea cu mult• ap•, înainte de scoaterea îmbr•c•mintei.
	SK	Kontaminovaný odev a pokožku ihne• opláchnite ve•kým množstvom vody a potom odev odstrá•te.
	SL	Takoj izprati kontaminirana obla•ila in kožo z veliko vode pred odstranitvijo obla•il.
	FI	Huuhdo saastunut vaatetus ja iho välittömästi runsaalla vedellä ennen vaatetuksen riisumista.
	SV	Skölj genast nedstänkta kläder och hud med mycket vatten innan du tar av dig kläderna.

P361	Language	
	BG	•••••• •••••• ••••••.
	ES	Quitarse inmediatamente las prendas contaminadas.
	CS	Veškeré kontaminované •ásti od•vu okamžit• svlékn•te.
	DA	Tilsmudset tøj tages straks af/fjernes.
	DE	Alle kontaminierten Kleidungsstücke sofort ausziehen.
	ET	Kõik saastunud rõivad viivitamata seljast võtta.
	EL	

P361	Language	
	EN	Remove/Take off immediately all contaminated clothing.
	FR	Enlever immédiatement les vêtements contaminés.
	GA	Bain díot láithreach na héadaí éillithe go léir.
	IT	Togliersi di dosso immediatamente tutti gli indumenti contaminati.
	LV	No•emt/Novilkt nekav•joties visu pies•r•oto ap••rbu.
	LT	Nedelsiant nuvilkti/pašalinti visus užterštus drabužius.
	HU	Az összes szennyezett ruhadarabot azonnal el kell távolítani/le kell vetni.
	MT	Ne••i/In•a' mall-ewwel l-ilbies ikkontaminat.
	NL	Verontreinigde kleding onmiddellijk uittrekken.
	PL	Natychmiast usun••/zdj•• ca•• zanieczyszczon• odzie•.
	PT	Despir/retirar imediatamente toda a roupa contaminada.
	RO	Scoate•i imediat toat• îmbr•c•mintea contaminat•.
	SK	Ihne• odstrá•te/vyzle•te všetky kontaminované •asti odevu.
	SL	Takoj odstraniti/sle•i vsa kontaminirana obla•ila.
	FI	Riisu saastunut vaatetus välittömästi.
	SV	Ta omedelbart av alla nedstänkta kläder.

P362	Language	
	BG	.
	ES	Quitarse las prendas contaminadas y lavarlas antes de volver a usarlas.
	CS	Kontaminovaný od•v svlékn•te a p•ed op•tovným použitím ho vyperte.
	DA	Forurennet tøj tages af og vaskes, før det bruges igen.
	DE	Kontaminierte Kleidung ausziehen und vor erneutem Tragen waschen.
	ET	Võtta saastunud rõivad seljast ja pesta neid enne järgmist kasutamist.
	EL	
	EN	Take off contaminated clothing and wash before reuse.
	FR	Enlever les vêtements contaminés et les laver avant réutilisation
	GA	Bain díot láithreach na héadaí éillithe go léir agus nigh iad sula ndéanfar iad a athúsáid.
	IT	Togliersi di dosso gli indumenti contaminati e lavarli prima di indossarli nuovamente.

P362	Language	
	LV	Novilkt pies•r•oto ap••rbu un pirms atk•rtotas lietošanas izmazg•t.
	LT	Nusivilkti užterštus drabužius ir išskalbti prieš v•l juos apsivelkant.
	HU	A szennyezett ruhát le kell vetni és az újbóli használat el•tt ki kell mosni.
	MT	In•a' l•wejje• kontaminati u a•silhom qabel ma ter•a' tu•ahom.
	NL	Verontreinigde kleding uittrekken en wassen alvorens deze opnieuw te gebruiken.
	PL	Zanieczyszczon• odzie• zdj•• i wypra• przed ponownym u•yciem.
	PT	Retirar a roupa contaminada e lavá-la antes de a voltar a usar.
	RO	Scoate•i îmbr•c•mintea contaminat• •i sp•la•i-o înainte de reutilizare.
	SK	Kontaminovaný odev vyzle•te a pred •alsím použitím vyperte.
	SL	Sle•i kontaminirana obla•ila in jih oprati pred ponovno uporabo.
	FI	Riisu ja pese saastunut vaetus ennen uudelleenkäyttöä.
	SV	Nedstänkta kläder tas av och tvättas innan de används igen.

P363	Language	
	BG	•••••••• ••••••••••••
	ES	Lavar las prendas contaminadas antes de volver a usarlas.
	CS	Kontaminovaný od•v p•ed op•tovným použitím vyperte.
	DA	Tilsmudset tøj skal vaskes, før det kan anvendes igen.
	DE	Kontaminierte Kleidung vor erneutem Tragen waschen.
	ET	Saastunud rõivad enne järgmist kasutamist pesta.
	EL	••••••••
	EN	Wash contaminated clothing before reuse.
	FR	Laver les vêtements contaminés avant réutilisation.
	GA	Nigh éadaí éillithe sula ndéanfar iad a athúsáid.
	IT	Lavare gli indumenti contaminati prima di indossarli nuovamente.
	LV	Pirms atk•rtotas lietošanas pies•r•oto ap••rbu izmazg•t.
	LT	Užterštus drabužius išskalbti prieš v•l juos apsivelkant.
	HU	A szennyezett ruhát újbóli használat el•tt ki kell mosni.
	MT	A•sel il•wejje• kontaminati qabel ter•a' tu•ahom.
	NL	Verontreinigde kleding wassen alvorens deze opnieuw te gebruiken.

P371	Language	
	CS	V p•ípad• velkého požáru a velkého množství:
	DA	Ved større brand og store mængder:
	DE	Bei Großbrand und großen Mengen:
	ET	Suure tulekahju korral ning kui on tegemist suurte kogustega:
	EL	
	EN	In case of major fire and large quantities:
	FR	En cas d'incendie important et s'il s'agit de grandes quantités:
	GA	I gcás mórdhóiteáin agus má tá cainníochtaí móra i gceist:
	IT	In caso di incendio grave e di quantità rilevanti:
	LV	Ugunsgr•ka un lielu apjomu gad•jum•:
	LT	Didelio gaisro ir dideli• kiekii• atveju:
	HU	Nagyobb t•z és nagy mennyiség esetén:
	MT	F'ka• ta' nar kbir u kwantitajiet kbar:
	NL	In geval van grote brand en grote hoeveelheden:
	PL	W przypadku powa•nego po•aru i du•ych ilo•ci:
	PT	Em caso de incêndio importante e de grandes quantidades:
	RO	În caz de incendiu de propor•ii •i de cantit•i mari de produs:
	SK	V prípade ve•kého požiaru a ve•kého množstva:
	SL	Ob velikem požaru in velikih koli•inah:
	FI	Jos tulipalo ja ainemäärät ovat suuret:
	SV	Vid större brand och stora mängder:

P372	Language	
	BG	•• ••••••••.
	ES	Riesgo de explosión en caso de incendio.
	CS	Nebezpe•í výbuchu v p•ípad• požáru.
	DA	Eksplosionsfare ved brand.
	DE	Explosionsgefahr bei Brand.
	ET	Tulekahju korral plahvatusoht.
	EL	
	EN	Explosion risk in case of fire.
	FR	Risque d'explosion en cas d'incendie.
	GA	Baol pléasctha i gcás dóiteáin.
	IT	Rischio di esplosione in caso di incendio.

P373	Language	
	PT	Se o fogo atingir os explosivos, NÃO tentar combatê-lo.
	RO	NU încerca•i s• stinge•i incendiul atunci când focul a ajuns la explozivi.
	SK	Požiar NEHASTE, ak sa ohe• priblížil k výbušnínám.
	SL	NE gasiti, ko ogenj doseže eksploziv.
	FI	Tulta EI SAA yrittää sammuttaa sen saavutettua räjähteet.
	SV	Försök INTE bekämpa branden när den når explosiva varor.

P374	Language	
	BG	••••• ••••• •
	ES	Luchar contra el incendio desde una distancia razonable, tomando las precauciones habituales.
	CS	Haste z p•im••ené vzdálenosti a dodržujte b•žná opat•ení.
	DA	Træf normale foranstaltninger mod brand og bekæmp den på en fornuftig afstand.
	DE	Brandbekämpfung mit üblichen Vorsichtsmaßnahmen aus angemessener Entfernung.
	ET	Kustutustöid teha tavaliste ettevaatusabinõudega ja mõistlikust kaugusest.
	EL	
	EN	Fight fire with normal precautions from a reasonable distance.
	FR	Combattre l'incendie à distance en prenant les précautions normales.
	GA	Déan na gnáth-réamhchúraimí chun an dóiteán a chomhrac gan a bheith níos gaire dó ná mar atá réasúnta.
	IT	Utilizzare i mezzi estinguenti con le precauzioni abituali a distanza ragionevole.
	LV	Dz•st ugunsgr•ku, •emot v•r• parastos droš•bas nosac•jumus un no sapr•t•ga att•luma.
	LT	Gaisr• gesinti laikantis •prastinio atsargumo pakankamu atstumu.
	HU	T•zoltás megfelel• távolságból a szokásos óvintézkedések betartásával.
	MT	Itfi n-nar bil-prekawzjonijiet normali minn distanza ra•onevoli.
	NL	Met normale voorzorgen vanaf een redelijke afstand blussen.
	PL	Gasi• po•ar z rozs•dnej odleg•o•ci z zachowaniem zwyk•ych •rodków ostro•no•ci.

P374	Language	
	PT	Combater o incêndio tomando as precauções normais e a partir de uma distância razoável.
	RO	Stinge•i incendiul de la o distan•• rezonabil•, luând m•suri normale de precau•ie.
	SK	Požiar haste z primeranej vzdialenosti pri dodržiavaní bežných bezpečnostných opatrení.
	SL	Gasiti z obi•ajno previdnostjo in s primerne razdalje.
	FI	Sammuta palo kohtuullisen välimatkan päästä tavanomaisin varotoimin.
	SV	Bekämpa branden på vanligt sätt på behörigt avstånd.

P375	Language	
	BG	•••••• •••••• •• •••••• •••••••• ••
	ES	Luchar contra el incendio a distancia, dado el riesgo de explosión.
	CS	Kv•li nebezpe•í výbuchu haste z dostate•né vzdálenosti.
	DA	Bekæmp branden på afstand på grund af eksplosionsfare.
	DE	Wegen Explosionsgefahr Brand aus der Entfernung bekämpfen.
	ET	Plahvatusohu tõttu teha kustutustöid eemalt.
	EL	
	EN	Fight fire remotely due to the risk of explosion.
	FR	Combattre l'incendie à distance à cause du risque d'explosion.
	GA	Téigh i gcianghleic leis an dóiteán mar gheall ar an mbaol pléasctha.
	IT	Rischio di esplosione. Utilizzare i mezzi estinguenti a grande distanza.
	LV	Dz•st ugunsgr•ku no att•luma eksplozijas riska d••.
	LT	Gaisr• gesinti iš toli d•l sprogimo pavojaus.
	HU	A t•z oltását robbanásveszély miatt távolból kell végezni.
	MT	Itfi n-nar mill-bog•od min•abba r-riskju ta' splu•joni.
	NL	Op afstand blussen omwille van ontploffingsgevaar.
	PL	Z powodu ryzyka wybuchu gasi• po•ar z odlego•ci.
	PT	Combater o incêndio à distância, devido ao risco de explosão.
	RO	Stinge•i incendiul de la distan•• din cauza pericolului de explozie.
	SK	Z dôvodu nebezpe•enstva výbuchu požiar haste z dia•ky.
	SL	Gasiti z ve•je razdalje zaradi nevarnosti eksplozije.
	FI	Sammuta palo etäältä räjähdysvaaran takia.

P375	Language	
	SV	Bekämpa branden på avstånd på grund av explosionsrisken.

P376	Language	
	BG	••••••••••, •••••
	ES	Detener la fuga, si no hay peligro en hacerlo.
	CS	Zastavte únik, m•žete-li tak u•init bez rizika.
	DA	Stand lækagen, hvis dette er sikkert.
	DE	Undichtigkeit beseitigen, wenn gefahrlos möglich.
	ET	Leke peatada, kui seda on võimalik teha ohutult.
	EL	
	EN	Stop leak if safe to do so.
	FR	Obturer la fuite si cela peut se faire sans danger.
	GA	Cuir stop leis an sceitheadh má tá sé sábháilte é sin a dhéanamh.
	IT	Bloccare la perdita se non c'è pericolo.
	LV	Apst•din•t nopl•di, ja to var izdar•t droš• veid•.
	LT	Sustabdyti nuot•k•, jeigu galima saugiai tai padaryti.
	HU	Meg kell szüntetni a szivárgást, ha ez biztonságosan megtehető.
	MT	Waqqaf it-tnixxija jekk ma jkunx hemm periklu.
	NL	Het lek dichten als dat veilig gedaan kan worden.
	PL	Je•eli jest to bezpieczne zahamowa• wyciek.
	PT	Deter a fuga se tal puder ser feito em segurança.
	RO	Opri•i scurgerea, dac• acest lucru se poate face în siguran••.
	SK	Zastavte únik, ak je to bezpe•né.
	SL	Zaustaviti puš•anje, •e je varno.
	FI	Sulje vuoto, jos sen voi tehdä turvallisesti.
	SV	Stoppa läckan om det kan göras på ett säkert sätt.

P377	Language	
	BG	•••••••••• •••: •••••••••••••• •• •• ••••.
	ES	Fuga de gas en llamas: No apagar, salvo si la fuga puede detenerse sin peligro.
	CS	Požár unikajícího plynu: Nehaste, nelze-li únik bezpe•n• zastavit.

P377	Language	
	DA	Brand fra udsivende gas: Sluk ikke, medmindre det er sikkert at stoppe lækagen.
	DE	Brand von ausströmendem Gas: Nicht löschen, bis Undichtigkeit gefahrlos beseitigt werden kann.
	ET	Lekkiva gaasi põlemise korral mitte kustutada, välja arvatud juhul, kui leket on võimalik ohutult peatada.
	EL	
	EN	Leaking gas fire: Do not extinguish, unless leak can be stopped safely.
	FR	Fuite de gaz enflammé: Ne pas éteindre si la fuite ne peut pas être arrêtée sans danger.
	GA	Tine gháis ag sceitheadh: Ná múch, mura i ndán agus gur féidir stop a chur leis an sceitheadh go sábháilte.
	IT	In caso d'incendio dovuto a perdita di gas, non estinguere a meno che non sia possibile bloccare la perdita senza pericolo.
	LV	Degšanas g•zes nopl•de: Nedz•st, ja vien nopl•di var apst•din•t droš• veid•.
	LT	Duj• nuot•kio sukeltas gaisras: Negesinti, nebent nuot•k• b•t• galima saugiai sustabdyti.
	HU	Ég• szivárgó gáz: Csak akkor szabad a tüzet oltani, ha a szivárgás biztonságosan megszüntethet•.
	MT	Tnixxija ta' gass tan-nar: Tippruvax titfiha, sakemm it-tnixxija ma tkunx tista' titwaqqaf bla periklu.
	NL	Brand door lekkend gas: niet blussen, tenzij het lek veilig gedicht kan worden.
	PL	W przypadku p•oni•cia wyciekaj•cego gazu: Nie gasi•, je•eli nie mo•na bezpiecznie zahamowa• wycieku.
	PT	Incêndio por fuga de gás: não apagar, a menos que se possa deter a fuga em segurança.
	RO	Incendiu cauzat de o scurgere de gaz: nu încerca•i s• stinge•i, decât dac• scurgerea poate fi oprit• în siguran••.
	SK	Požiar unikajúceho plynu: Nehaste, pokia• únik nemožno bezpe•ne zastavi•.
	SL	Požar zaradi uhajanja plina: Ne gasiti, •e puš•anja ni mogo•e varno zaustaviti.
	FI	Vuotavasta kaasusta johtuva palo: Ei saa sammuttaa, jollei vuotoa voida pysäyttää turvallisesti.

P377	Language	
	SV	Läckande gas som brinner: Försök inte släcka branden om inte läckan kan stoppas på ett säkert sätt.

P378	Language	
	BG	•• ... ••••••••••,
	ES	Utilizar ... para apagarlo.
	CS	K hašení použijte
	DA	Anvend ... til brandslukning.
	DE	... zum Löschen verwenden.
	ET	Kustutamiseks kasutada
	EL	
	EN	Use ... for extinction.
	FR	Utiliser ... pour l'extinction.
	GA	Úsáid ... le haghaidh múchta.
	IT	Estinguere con...
	LV	Nodz•šanai izmantot...
	LT	Gesinimui naudoti ...
	HU	Az oltáshoz ... használandó.
	MT	U•a' ... biex titfi.
	NL	Blussen met ...
	PL	U•y• ... do gaszenia.
	PT	Para a extinção utilizar ...
	RO	Utiliza•i... pentru stingere.
	SK	Na hasenie použite
	SL	Za gašenje uporabiti ...
	FI	Käytä palon sammuttamiseen ...
	SV	Släck branden med

P380	Language	
	BG	••••••••••,
	ES	Evacuar la zona.
	CS	Vykli•te _roctor.
	DA	Evakuer området.
	DE	Umgebung räumen.

P380	Language	
	ET	Ala evakueerida.
	EL	
	EN	Evacuate area.
	FR	Évacuer la zone.
	GA	Aslonnaigh gach duine as an limistéar.
	IT	Evacuare la zona.
	LV	Evaku•t zonu.
	LT	Evakuoti zon•.
	HU	A területet ki kell üríteni.
	MT	Evakwa •••ona.
	NL	Evacueren.
	PL	Ewakuowa• teren.
	PT	Evacuar a zona.
	RO	Evacua•i zona.
	SK	Priestory evakuujte.
	SL	Izprazniti obmo•je.
	FI	Evakuoi alue.
	SV	Utrym området.

P381	Language	
	BG	•••••••• •• , •••••
	ES	Eliminar todas las fuentes de ignición si no hay peligro en hacerlo.
	CS	Odstra•te všechny zdroje zapálení, m•žete-li tak u•init bez rizika.
	DA	Fjern alle antændelseskilder, hvis dette kan gøres sikkert.
	DE	Alle Zündquellen entfernen, wenn gefahrlos möglich.
	ET	Eemaldada kõik süüteallikad, kui seda on võimalik teha ohutult.
	EL	
	EN	Eliminate all ignition sources if safe to do so.
	FR	Éliminer toutes les sources d'ignition si cela est faisable sans danger.
	GA	Díothaigh gach foinse adhainte, má tá sé sábháilte é sin a dhéanamh.
	IT	Eliminare ogni fonte di accensione se non c'è pericolo.
	LV	Nov•rst visus uzliesmošanas avotus, ja to var izdar•t droši.

P381	Language	
	LT	Pašalinti visus uždegimo šaltinius, jeigu galima saugiai tai padaryti.
	HU	Meg kell szüntetni az összes gyújtóforrást, ha ez biztonságosan megtehető.
	MT	Elimina s-sorsi kollha li jqabbdu sakemm ma jkunx perikolu• li tag•mel dan.
	NL	Alle ontstekingsbronnen wegnemen als dat veilig gedaan kan worden.
	PL	Wyeliminowa• wszystkie •ród•a zap•onu, je•eli jest to bezpieczne.
	PT	Eliminar todas as fontes de ignição se tal puder ser feito em segurança.
	RO	Elimina•i toate sursele de aprindere, dac• acest lucru se poate face în siguran••.
	SK	Ak je to bezpe•né, odstrá•te všetky zdroje zapálenia.
	SL	Odstraniti vse vire vžiga, •e je varno.
	FI	Poista kaikki sytytyslähteet, jos sen voi tehdä turvallisesti.
	SV	Avlägsna alla antändningskällor om det kan göras på ett säkert sätt.

P390	Language	
	BG	, ••••• •••••.
	ES	Absorber el vertido para que no dañe otros materiales.
	CS	Uniklý produkt absorbujte, aby se zabránilo materiálním škodám.
	DA	Absorber udslip for at undgå materielskade.
	DE	Verschüttete Mengen aufnehmen, um Materialschäden zu vermeiden.
	ET	Mahavoolanud toode absorbeerida, et see ei kahjustaks teisi materjale.
	EL	
	EN	Absorb spillage to prevent material damage.
	FR	Absorber toute substance répandue pour éviter qu'elle attaque les matériaux environnants.
	GA	Ionsúigh doirteadh chun damáiste d'ábhar a chosc.
	IT	Assorbire la fuoriuscita per evitare danni materiali.
	LV	Uzs•kt izš•akst•jumus, lai nov•rstu materi•lus zaud•jumus.
	LT	Absorbuoti išsiliejusi• medžiag•, siekiant išvengti materialin•s žalos.

P390	Language	
	HU	A kiömlött anyagot fel kell itatni a körülve• anyagok károsodásának megelőzése érdekében.
	MT	Assorbi t-tixrid biex tipprevjeni •sara fil-materjal.
	NL	Gelekte/gemorste stof opnemen om materiële schade te vermijden.
	PL	Usun•• wyciek, aby zapobiec szkodom materialnym.
	PT	Absorver o produto derramado a fim de evitar danos materiais.
	RO	Absorbi•i scurgerile de produs, pentru a nu afecta materialele din apropiere.
	SK	Absorbujte uniknutý produkt, aby sa zabránilo materiálnym škodám.
	SL	Odpraviti razlitje, da se prepre•i materialna škoda.
	FI	Imeytä valumat vahinkojen estämiseksi.
	SV	Sug upp spill för att undvika materiella skador.

P391	Language	
	BG	••••••••
	ES	Recoger el vertido.
	CS	Uniklý produkt seberte.
	DA	Udslip opsamlles.
	DE	Verschüttete Mengen aufnehmen.
	ET	Mahavoolanud toode kokku koguda.
	EL	
	EN	Collect spillage.
	FR	Recueillir le produit répandu.
	GA	Bailigh doirteadh.
	IT	Raccogliere il materiale fuoriuscito.
	LV	Sav•kt izš•akst•to š•idrumu.
	LT	Surinkti ištek•jusi• medžiag•.
	HU	A kiömlött anyagot össze kell gy•jteni.
	MT	I•bor it-tixrid.
	NL	Gelekte/gemorste stof opruimen.
	PL	Zebra• wyciek.
	PT	Recolher o produto derramado.
	RO	Colecta•i scurgerile de produs.
	SK	Zozbierajte uniknutý produkt.
	SL	Prestre•i razlito teko•ino.

P391	Language	
	FI	Valumat on kerättävä.
	SV	Samla upp spill.

P301 + P310	Language	
	BG	
	ES	EN CASO DE INGESTIÓN: Llamar inmediatamente a un CENTRO DE INFORMACIÓN TOXICOLÓGICA o a un médico.
	CS	P•I POŽITÍ: Okamžit• volejte TOXIKOLOGICKÉ INFORMA•NÍ ST•EDISKO nebo léka•e.
	DA	I TILFÆLDE AF INDTAGELSE: Ring omgående til en GIFTINFORMATION eller en læge.
	DE	BEI VERSCHLUCKEN: Sofort GIFTINFORMATIONSZENTRUM oder Arzt anrufen.
	ET	ALLANEELAMISE KORRAL: võtta viivitamata ühendust MÜRGISTUSTEABEKESKUSE või arstiga.
	EL	
	EN	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
	FR	EN CAS D'INGESTION: appeler immédiatement un CENTRE ANTIPOISON ou un médecin.
	GA	MÁ SHLOGTAR: Cuir glao láithreach ar IONAD NIMHE nó ar dhochtúir/lia.
	IT	IN CASO DI INGESTIONE: contattare immediatamente un CENTRO ANTIVELENI o un medico
	LV	NOR•ŠANAS GAD•JUM• : Nekav•joties sazin•ties ar SAIND•ŠAN•S CENTRU vai •rstu.
	LT	PRARIJUS: Nedelsiant skambinti • APSINUODIJIM• KONTROL•S IR INFORMACIJOS BIUR• arba kreiptis • gydytoj•.
	HU	LENYELÉS ESETÉN: azonnal forduljon TOXIKOLÓGIAI KÖZPONTHOZ vagy orvoshoz.
	MT	JEKK JINBELA': Ikkuntattja • ENTRU TA' L-AVVELENAMENT jew tabib.
	NL	NA INSLIKKEN: onmiddellijk een ANTIGIFCENTRUM of een arts raadplegen.

P301 + P310	Language	
	PL	W PRZYPADKU PO•KNI•CIA: Natychmiast skontaktowa• si• z O•RODKIEM ZATRU• lub z lekarzem.
	PT	EM CASO DE INGESTÃO: contacte imediatamente um CENTRO DE INFORMAÇÃO ANTIVENENOS ou um médico.
	RO	ÎN CAZ DE ÎNGHI•IRE: suna•i imediat la un CENTRU DE INFORMARE TOXICOLOGIC• sau un medic.
	SK	PO POŽITÍ: okamžite volajte NÁRODNÉ TOXIKOLOGICKÉ INFORMA•NÉ CENTRUM alebo lekára.
	SL	PRI ZAUŽITJU: takoj pokli•ite CENTER ZA ZASTRUPITVE ali zdravnika.
	FI	JOS KEMIKAALIA ON NIELTY: Ota välittömästi yhteys MYRKYTYSTIETOKESKUKSEEN tai lääkäriin.
	SV	VID FÖRTÄRING: Kontakta genast GIFTINFORMATIONSCENTRAL eller läkare.

P301 + P312	Language	
	BG	
	ES	EN CASO DE INGESTIÓN: Llamar a un CENTRO DE INFORMACIÓN TOXICOLÓGICA o a un médico si se encuentra mal.
	CS	P•I POŽITÍ: Necítíte-li se dob•e, volejte TOXIKOLOGICKÉ INFORMA•NÍ ST•EDISKO nebo léka•e.
	DA	I TILFÆLDE AF INDTAGELSE: I tilfælde af ubehag ring til en GIFTINFORMATION eller en læge.
	DE	BEI VERSCHLUCKEN: Bei Unwohlsein GIFTINFORMATIONSZENTRUM oder Arzt anrufen.
	ET	ALLANEELAMISE KORRAL: halva enesetunde korral võtta ühendust MÜRGISTUSTEABEKESKUSE või arstiga.
	EL	
	EN	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
	FR	EN CAS D'INGESTION: appeler un CENTRE ANTIPOISON ou un médecin en cas de malaise.

P301 + P312	Language	
	GA	MÁ SHLOGTAR: Cuir glao ar IONAD NIMHE nó ar dhoctúir/lia má bhraitheann tú tinn.
	IT	IN CASO DI INGESTIONE accompagnata da malessere: contattare un CENTRO ANTIVELENI o un medico.
	LV	NORŠANAS GADJUM : sazin•ties ar SAIND•ŠAN•S CENTRU vai •rstu, ja jums ir slikta pašsaj•ta.
	LT	PRARIJUS: Pasijutus blogai, skambinti • APSINUODIJIM• KONTROL•S IR INFORMACIJOS BIUR• arba kreiptis • gydytoj•.
	HU	LENYELÉS ESETÉN: rosszullét esetén azonnal forduljon TOXIKOLÓGIAI KÖZPONTHOZ vagy orvoshoz.
	MT	JEKK JINBELA': Ikkuntattja • ENTRU TA' L-AVVELENAMENT jew tabib jekk t•ossok ma tifla•x.
	NL	NA INSLIKKEN: bij onwel voelen een ANTIGIFCENTRUM of een arts raadplegen.
	PL	W PRZYPADKU PO•KNI•CIA: W przypadku z•ego samopoczucia skontaktowa• si• z O•RODKIEM ZATRU• lub z lekarzem.
	PT	EM CASO DE INGESTÃO: caso sinta indisposição, contacte um CENTRO DE INFORMAÇÃO ANTIVENENOS ou um médico.
	RO	ÎN CAZ DE ÎNGHI•IRE: suna•i la un CENTRU DE INFORMARE TOXICOLOGIC• sau un medic, dac• nu v• sim•i•i bine.
	SK	PO POŽITÍ: ak máte zdravotné problémy, okamžite volajte NÁRODNÉ TOXIKOLOGICKÉ INFORMA•NÉ CENTRUM alebo lekára.
	SL	PRI ZAUŽITJU: ob slabem po•utju pokli•ite CENTER ZA ZASTRUPITVE ali zdravnika.
	FI	JOS KEMIKAALIA ON NIELTY: Ota yhteyks MYRKYTYSTIETOKESKUKSEEN tai lääkäriin, jos ilmenee pahoinvointia.
	SV	VID FÖRTÄRING: Kontakta GIFTINFORMATIONSCENTRAL eller läkare om du mår dåligt.

P301 + P330 + P331	Language	

P301 + P330 + P331	Language	
	BG	••• ••
	ES	EN CASO DE INGESTIÓN: Enjuagarse la boca. NO provocar el vómito.
	CS	P•I POŽITÍ: Vypláchn•te ústa. NEVYVOLÁVEJTE zvracení.
	DA	I TILFÆLDE AF INDTAGELSE: Skyl munden. Fremkald IKKE opkastning.
	DE	BEI VERSCHLUCKEN: Mund ausspülen. KEIN Erbrechen herbeiführen.
	ET	ALLANEELAMISE KORRAL: loputada suud. MITTE kutsuda esile oksendamist.
	EL	• • •
	EN	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
	FR	EN CAS D'INGESTION: rincer la bouche. NE PAS faire vomir.
	GA	MÁ SHLOGTAR: sruthlaifeat an béal. NÁ déan urlacan a spreagadh.
	IT	IN CASO DI INGESTIONE: sciacquare la bocca. NON provocare il vomito.
	LV	NOR•ŠANAS GAD•JUM• : izskalot muti. NEIZRAIS•T vemšanu.
	LT	PRARIJUS: išskalauti burn•. NESKATINTI v•mimo.
	HU	LENYELÉS ESETÉN: a száját ki kell öblíteni. TILOS hánytatni.
	MT	JEKK JINBELA': la•la• il-•alq. TIPPROVOKAX ir-remettar.
	NL	NA INSLIKKEN: de mond spoelen – GEEN braken opwekken.
	PL	W PRZYPADKU PO•KNI•CIA: wyp•uka• usta. NIE wywo•ywa• wymiotów.
	PT	EM CASO DE INGESTÃO: enxaguar a boca. NÃO provocar o vómito.
	RO	ÎN CAZ DE ÎNGHI•IRE: cl•ti•i gura. NU provoca•i voma.
	SK	PO POŽITÍ: vypláchnite ústa. Nevyvolávajte zvracanie.
	SL	PRI ZAUŽITJU: izprati usta. NE izzvati bruhanja.
	FI	JOS KEMIKAALIA ON NIELTY: Huhdo suu. EI saa oksennutta.
	SV	VID FÖRTÄRING: Skölj munnen. Framkalla INTE kräkning.

P302 + P334	Language	
	BG	•••••••••• ••• •••
	ES	EN CASO DE CONTACTO CON LA PIEL: Sumergir en agua fresca/aplicar compresas húmedas.
	CS	P•I STYKU S K•ŽÍ: Pono•te do studené vody/zabalte do vlhkého obvazu.
	DA	VED KONTAKT MED HUDEN: Skyl under koldt vand/anvend våde omslag.
	DE	BEI KONTAKT MIT DER HAUT: In kaltes Wasser tauchen/nassen Verband anlegen.
	ET	NAHALE SATTUMISE KORRAL: hoida jahedas vees / panna peale niiske kompress.
	EL	
	EN	IF ON SKIN: Immerse in cool water/wrap in wet bandages.
	FR	EN CAS DE CONTACT AVEC LA PEAU: rincer à l'eau fraîche/poser une compresse humide.
	GA	I gCÁS TEAGMHÁLA LEIS AN gCRAICEANN: Tum in uisce fionnuar/cuir bréid fliuch air.
	IT	IN CASO DI CONTATTO CON LA PELLE: immergere in acqua fredda/avvolgere con un bendaggio umido.
	LV	SASKAR• AR •DU: iegremd•t v•s• •den• / iet•t mitros aps•jos.
	LT	PATEKUS ANT ODOS: •merkti •v•s• vanden•/apvynioti šlapiais tvar•iais.
	HU	HA B•RRE KERÜL: Hideg vízzel/nedves kötészel kell h•teni.
	MT	JEKK FUQ IL-•ILDA: Da••al fl-ilma frisk/kebbeb f'faxex imxarrbin.
	NL	BIJ CONTACT MET DE HUID: in koud water onderdompelen/nat verband aanbrenen.
	PL	W PRZYPADKU KONTAKTU ZE SKÓR• : Zanurzy• w zimnej wodzie/owin•• mokrym banda•em.
	PT	SE ENTRAR EM CONTACTO COM A PELE: mergulhar em água fria/aplicar compresas húmidas.
	RO	ÎN CAZ DE CONTACT CU PIELEA: introduce•i în ap•rece/acoperi•i cu o compres• umed•.
	SK	PRI KONTAKTE S POKOŽKOU: Ponorte do studenej vody/obviažte mokrými obvázmi.
	SL	PRI STIKU S KOŽO: potopiti v hladno vodo/zaviti v mokre povoje.

P302 + P334	Language	
	FI	JOS KEMIKAALIA JOUTUU IHOLLE: Upota kylmään veteen/kääri märkiin siteisiin.
	SV	VID HUDKONTAKT: Skölj under kallt vatten/ använd våta omslag.

P302 + P350	Language	
	BG	
	ES	EN CASO DE CONTACTO CON LA PIEL: Lavar suavemente con agua y jabón abundantes.
	CS	P•I STYKU S K•ŽÍ: Jemn• omyjte velkým množstvím vody a mýdla.
	DA	VED KONTAKT MED HUDEN: Vask forsigtigt med rigeligt sæbe og vand.
	DE	BEI KONTAKT MIT DER HAUT: Behutsam mit viel Wasser und Seife waschen.
	ET	NAHALE SATTUMISE KORRAL: pesta õrnalt rohke vee ja seebiga.
	EL	
	EN	IF ON SKIN: Gently wash with plenty of soap and water.
	FR	EN CAS DE CONTACT AVEC LA PEAU: laver avec précaution et abondamment à l'eau et au savon.
	GA	I gCÁS TEAGMHÁLA LEIS AN gCRAICEANN: Nigh go bog le neart gallúnaí agus uisce.
	IT	IN CASO DI CONTATTO CON LA PELLE: lavare delicatamente e abbondantemente con acqua e sapone.
	LV	SASKAR• AR •DU: maigi nomazg•t ar lielu ziepju un •dens daudzumu.
	LT	PATEKUS ANT ODOS: Atsargiai nuplauti dideliu kiekiu muilo ir vandens.
	HU	HA B•RRE KERÜL: Óvatos lemosás b• szappanos vízzel.
	MT	JEKK FUQ IL-•ILDA: A•sel bil-mod b'•afna sapun u ilma.
	NL	BIJ CONTACT MET DE HUID: voorzichtig wassen met veel water en zeep.

P302 + P350	Language	
	PL	W PRZYPADKU DOSTANIA SI • NA SKÓR •: Delikatnie umy• du•• ilo•c• wody z myd•em.
	PT	SE ENTRAR EM CONTACTO COM A PELE: lavar suavemente com sabonete e água abundantes.
	RO	ÎN CAZ DE CONTACT CU PIELEA: sp•la•i u•or cu mult• ap• •i s•pun.
	SK	PRI KONTAKTE S POKOŽKOU: Opatrne umyte ve•kým množstvom vody a mydla.
	SL	PRI STIKU S KOŽO: nežno umiti z veliko mila in vode.
	FI	JOS KEMIKAALIA JOUTUU IHOLLE: Pese varovasti runsaalla vedellä ja saippualla.
	SV	VID HUDKONTAKT: Tvätta försiktigt med mycket tvål och vatten.

P302 + P352	Language	
	BG	••••.
	ES	EN CASO DE CONTACTO CON LA PIEL: Lavar con agua y jabón abundantes.
	CS	P•I STYKU S K• ŽÍ: Omyjte velkým množstvím vody a mýdla.
	DA	VED KONTAKT MED HUDEN: Vask med rigeligt sæbe og vand.
	DE	BEI KONTAKT MIT DER HAUT: Mit viel Wasser und Seife waschen.
	ET	NAHALE SATTUMISE KORRAL: pesta rohke vee ja seebiga.
	EL	

P302 + P352	Language	
	HU	HA B•RRE KERÜL: Lemosás b• szappanos vízzel.
	MT	JEKK FUQ IL-• ILDA: A•sel b'•afna sapun u ilma.
	NL	BIJ CONTACT MET DE HUID: met veel water en zeep wassen.
	PL	W PRZYPADKU KONTAKTU ZE SKÓR•: Umy• du•• ilo•ci• wody z myd•em.
	PT	SE ENTRAR EM CONTACTO COM A PELE: lavar com sabonete e água abundantes.
	RO	ÎN CAZ DE CONTACT CU PIELEA: sp•la•i cu mult• ap••i s•pun.
	SK	PRI KONTAKTE S POKOŽKOU: Umyte ve•kým množstvom vody a mydla.
	SL	PRI STIKU S KOŽO: umiti z veliko mila in vode.
	FI	JOS KEMIKAALIA JOUTUU IHOLLE: Pese runsaalla vedellä ja saippualla.
	SV	VID HUDKONTAKT: Tvätta med mycket tvål och vatten.

P303 + P361 + P353	Language	
	BG	•••
	ES	EN CASO DE CONTACTO CON LA PIEL (o el pelo): Quitarse inmediatamente las prendas contaminadas. Aclararse la piel con agua o ducharse.
	CS	P•I STYKU S K•ŽÍ (nebo s vlasy): Veškeré kontaminované •ásti od•vu okamžit• svlékn•te. Opláchn•te k•ži vodou/osprchujte.
	DA	VED KONTAKT MED HUDEN (eller håret): Tilsmudset tøj tages straks af/fjernes. Skyl/brus huden med vand.
	DE	BEI KONTAKT MIT DER HAUT (oder dem Haar): Alle beschmutzten, getränkten Kleidungsstücke sofort ausziehen. Haut mit Wasser abwaschen/duschen.
	ET	NAHALE (või juustele) SATTUMISE KORRAL: võtta viivitamata kõik saastunud rõivad seljast. Loputada nahka veega / loputada duši all.

P303 + P361 + P353	Language	
	EL	:
	EN	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
	FR	EN CAS DE CONTACT AVEC LA PEAU (ou les cheveux): enlever immédiatement les vêtements contaminés. Rincer la peau à l'eau/se doucher.
	GA	I gCÁS TEAGMHÁLA LEIS AN gCRAICEANN(nó le gruaig): Bain díot láithreach na héadaí éillithe go léir. Sruthlaítear an craiceann le huisce/glac cithfholcadh.
	IT	IN CASO DI CONTATTO CON LA PELLE (o con i capelli): togliersi di dosso immediatamente tutti gli indumenti contaminati. Sciacquare la pelle/fare una doccia.
	LV	SASKAR• AR • DU (vai matiem): no••rbt visu pies•r•oto ap••rbu. Noskalot •du ar •deni/ duš•.
	LT	PATEKUS ANT ODOS (arba plauk•): Nedelsiant nuvilkti/pašalinti visus užterštus drabužius. Od• nuplauti vandeniū/•iurkšle.
	HU	HA B•RRE (vagy hajra) KERÜL: Az összes szennyezett ruhadarabot azonnal el kell távolítani/le kell vetni. A b•rt le kell öblíteni vízzel/zuhanyozás.
	MT	JEKK FUQ IL-•ILDA (jew xag•ar): Ne••i/in•a' minnufih l- ilbies kontaminat. La•la• il-•ilda bl-ilma/bix-xawer.
	NL	BIJ CONTACT MET DE HUID (of het haar): verontreinigde kleding onmiddellijk uittrekken – huid met water afspoelen/afdouchen.
	PL	W PRZYPADKU KONTATKU ZE SKÓR• (lub z w•osami): Natychmiast usun••/zdj•• ca•• zanieczyszczon• odzie•. Sp•uka• skór• pod strumieniem wody/prysznicem.
	PT	SE ENTRAR EM CONTACTO COM A PELE (ou o cabelo): despir/retirar imediatamente toda a roupa contaminada. Enxaguar a pele com água/tomar um duche.
	RO	ÎN CAZ DE CONTACT CU PIELEA (sau p•rul): scoate•i imediat toat• îmbr•c•minteaa contaminat•. Cl•ti•i pielea cu ap•/face•i du•.
	SK	PRI KONTAKTE S POKOŽKOU (alebo vlasmi): Odstrá•te/vyzle•te všetky kontaminované •asti odevu. Pokožku ihne• opláchnite vodou/sprchou.

P303 + P361 + P353	Language	
	SL	PRI STIKU S KOŽO (ali lasmi): takoj odstraniti/sle•i vsa kontaminirana obla•ila. Izprati kožo z vodo/prho.
	FI	JOS KEMIKAALIA JOUTUU IHOLLE (tai hiuksiin): Riisu saastunut vaateset välittömästi. Huuho/suihkuta iho vedellä.
	SV	VID HUDKONTAKT (även håret): Ta omedelbart av alla nedstänkta kläder. Skölj huden med vatten/duscha.

P304 + P340	Language	
	BG	••••••••
	ES	EN CASO DE INHALACIÓN: Transportar a la víctima al exterior y mantenerla en reposo en una posición confortable para respirar.
	CS	P•I VDECHNUTÍ: P•eneste postiženého na •erstvý vzduch a ponechte jej v klidu v poloze usnad•ující dýchání.
	DA	VED INDÅNDING: Flyt personen til et sted med frisk luft og sørg for, at vedkommende hviler i en stilling, som letter vejrtrækningen.
	DE	BEI EINATMEN: An die frische Luft bringen und in einer Position ruhigstellen, die das Atmen erleichtert.
	ET	SISSEHINGAMISE KORRAL: toimetada kannatanu värske õhu kätte ja asetada mugavasse puhkeasendisse, mis võimaldab kergesti hingata.
	EL	••••••••
	EN	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
	FR	EN CAS D'INHALATION: transporter la victime à l'extérieur et la maintenir au repos dans une position où elle peut confortablement respirer.
	GA	MÁ IONÁLAÍTEAR, tabhair amach faoin aer an duine agus coimeád socair é, i riocht ina bhféadfaidh sé anáil a tharraingt go réidh.
	IT	IN CASO DI INALAZIONE: trasportare l'infortunato all'aria aperta e mantenerlo a riposo in posizione che favorisca la respirazione.

P304 + P340	Language	
	LV	IEELPOŠANAS GAD•JUM• : izvest cietušo svaig• gais• un tur•t miera st•vokl•, lai b•tu •rti elpot.
	LT	•KV•PUS: Išnešti nukent•jus•j•• gryn• or•; jam b•tina ramyb• ir pad•tis, leidžianti laisvai kv•puoti.
	HU	BELÉLEGZÉS ESETÉN: Az érintett személyt friss leveg•re kell vinni és olyan nyugalmi testhelyzetbe kell helyezni, hogy könnyen tudjon lélegezni.
	MT	JEKK JITTIE • ED FIN-NIFS: Esponi lill-vittma g•all-arja friska u •ommha mistrie•a f'po•izzjoni komda biex tkun tista' tie•u n-nifs.
	NL	NA INADEMING: het slachtoffer in de frisse lucht brengen en laten rusten in een houding die het ademen vergemakkelijkt.
	PL	W PRZYPADKU DOSTANIA SI • DO DRÓG ODDECHOWYCH: wyprowadzi• lub wynie•• uszkodzowanego na •wie•e powietrze i zapewni• warunki do odpoczynku w pozycji umo•liwiającej swobodne oddychanie.
	PT	EM CASO DE INALAÇÃO: retirar a vítima para uma zona ao ar livre e mantê-la em repouso numa posição que não dificulte a respiração.
	RO	ÎN CAZ DE INHALARE: transporta•i victima la aer liber •i men•ine•i-o în stare de repaus, într-o pozi•ie confortabil• pentru respira•ie.
	SK	PO VDÝCHNUTÍ: Presu•te postihnutého na •erstvý vzduch a nechajte ho oddychova• v polohe, ktorá mu umožní pohodlné dýchanie.
	SL	PRI VDIHAVANJU: prenesti žrtev na svež zrak in jo pustiti po•ivati v položaju, ki olajša dihanje.
	FI	JOS KEMIKAALIA ON HENGITETTY: Siirrä henkilö raittiiseen ilmaan ja pidä lepoasennossa, jossa on helppo hengittää.
	SV	VID INANDNING: Flytta personen till frisk luft och se till att han eller hon vilar i en ställning som underlättar andningen.

P304 + P341	Language	
	BG	

P304 + P341	Language	
	ES	EN CASO DE INHALACIÓN: Si respira con dificultad, transportar a la víctima al exterior y mantenerla en reposo en una posición confortable para respirar.
	CS	P•I VDECHNUTÍ: P•i obtížném dýchání p•eneste postiženého na •erstvý vzduch a ponechte jej v klidu v poloze usnad•ující dýchání.
	DA	VED INDÅNDING: Ved vejrtrækningsbesvær: Flyt personen til et sted med frisk luft og sørg for, at vedkommende hviler i en stilling, som letter vejrtrækningen.
	DE	BEI EINATMEN: Bei Atembeschwerden an die frische Luft bringen und in einer Position ruhigstellen, die das Atmen erleichtert.
	ET	SISSEHINGAMISE KORRAL: hingamisraskuste korral toimetada kannatanu värske õhu kätte ja asetada mugavasse puhkeasendisse, mis võimaldab kergesti hingata.
	EL	

P304 + P341	Language	
	NL	NA INADEMING: bij ademhalingsmoeilijkheden het slachtoffer in de frisse lucht brengen en laten rusten in een houding die het ademen vergemakkelijkt.
	PL	W PRZYPADKU DOSTANIA SI • DO DRÓG ODDECHOWYCH: W przypadku trudno•ci z oddychaniem, wyprowadzi• lub wynie•• poszkodowanego na •wie•e powietrze i zapewni• warunki do odpoczynku w pozycji umo•liwiaj•cej swobodne oddychanie.
	PT	EM CASO DE INALAÇÃO: em caso de dificuldade respiratória, retirar a vítima para uma zona ao ar livre e mantê-la em repouso numa posição que não dificulte a respiração.
	RO	ÎN CAZ DE INHALARE: dac• respira•ia este dificil•, transporta•i victima la aer liber •i men•ine•i-o în stare de repaus, într-o pozi•ie confortabil• pentru respira•ie.
	SK	PO VDÝCHNUTÍ: Ak nastanú •ažkosti s dýchaním, presu•te postihnutého na •erstvý vzduch a nechajte ho oddychova• v polohe, ktorá mu umožní pohodlné dýchanie.
	SL	PRI VDIHAVANJU: prenesti žrtev pri oteženem dihanju na svež zrak in jo pustiti po•ivati v položaju, ki olajša dihanje.
	FI	JOS KEMIKAALIA ON HENGITETTY: Jos hengitys vaikeuksia, siirrä henkilö raittiiseen ilmaan ja pidä lepoasennossa, jossa on helppo hengittää.
	SV	VID INANDNING: Vid andningsbesvär, flytta personen till frisk luft och se till att han eller hon vilar i en ställning som underlättar andningen.

P305 + P351 + P338	Language	
	BG	
	ES	EN CASO DE CONTACTO CON LOS OJOS: Aclarar cuidadosamente con agua durante varios minutos. Quitar las lentes de contacto, si lleva y resulta fácil. Seguir aclarando.
	CS	P•I ZASAŽENÍ O•Í: N•kolik minut opatr• vyplachujte vodou. Vyjm•te kontaktní •o•ky, jsou-li nasazeny a pokud je lze vyjmout snadno. Pokra•ujte ve vyplachování.

P305 + P351 + P338	Language	
	DA	VED KONTAKT MED ØJNENE: Skyl forsigtigt med vand i flere minutter. Fjern eventuelle kontaktlinser, hvis dette kan gøres let. Fortsæt skylning.
	DE	BEI KONTAKT MIT DEN AUGEN: Einige Minuten lang behutsam mit Wasser spülen. Vorhandene Kontaktlinsen nach Möglichkeit entfernen.. Weiter spülen.
	ET	SILMA SATTUMISE KORRAL: loputada mitme minuti jooksul ettevaatlikult veega. Eemaldada kontaktläätsed, kui neid kasutatakse ja kui neid on kerge eemaldada. Loputada veel kord.
	EL	
	EN	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	FR	EN CAS DE CONTACT AVEC LES YEUX: rincer avec précaution à l'eau pendant plusieurs minutes. Enlever les lentilles de contact si la victime en porte et si elles peuvent être facilement enlevées. Continuer à rincer.
	GA	I gCÁS TEAGMHÁLA LEIS NA SÚILE: Sruthlaigh go cúramach le huisce ar feadh roinnt nóiméad. Tóg amach na tadhall-lionsaí, más ann dóibh agus más furasta. Lean den sruthlú.
	IT	IN CASO DI CONTATTO CON GLI OCCHI: sciacquare accuratamente per parecchi minuti. Togliere le eventuali lenti a contatto se è agevole farlo. Continuare a sciacquare.
	LV	SASKAR• AR AC•M: uzman•gi izskalot ar •deni vair•kas min•tes. Iz•emt kontaktl•cas, ja t•s ir ievietotas un ja to ir viegli izdar•t. Turpin•t skalot.
	LT	PATEKUS • AKIS: Kelias minutes atsargiai plauti vandeniu. Išimti kontaktinius l•šius, jeigu jie yra ir jeigu lengvai galima tai padaryti. Toliau plauti akis.
	HU	SZEMBE KERÜLÉS esetén: Több percig tartó óvatos öblítés vízzel. Adott esetben a kontaktlencsék eltávolítása, ha könnyen megoldható. Az öblítés folytatása.
	MT	JEKK JID• OL FL-G• AJNEJN: La•la• b'attenzjoni bl-ilma g•al diversi minuti. Ne••i l-lentijiet tal-kuntatt, jekk ikun hemm u jkunu fa•li biex tne••ihom. Komplli la•la•.

P305 + P351 + P338	Language	
	NL	BIJ CONTACT MET DE OGEN: voorzichtig afspoelen met water gedurende een aantal minuten; contactlenzen verwijderen, indien mogelijk; blijven spoelen.
	PL	W PRZYPADKU DOSTANIA SI DO OCZU: Ostro nie puka wod przez kilka minut. Wyj soczewki kontaktowe, jeżeli się można je łatwo usunąć. Nadal puka.
	PT	SE ENTRAR EM CONTACTO COM OS OLHOS: enxaguar cuidadosamente com água durante vários minutos. Se usar lentes de contacto, retire-as, se tal lhe for possível. Continuar a enxaguar.
	RO	ÎN CAZ DE CONTACT CU OCHII: clătiți cu atenție cu apă timp de mai multe minute. Scoateți lentilele de contact, dacă este cazul și dacă acest lucru se poate face cu ușurință. Continuați să clătiți.
	SK	PO ZASIAHNUTÍ OČI: Niekoľko minút ich opatrne vyplachujte vodou. Ak používate kontaktné šošovky a ak je to možné, odstráňte ich. Pokračujte vo vyplachovaní.
	SL	PRI STIKU Z OČMI: previdno izpirajte z vodo nekaj minut. Odstranite kontaktne leče, če jih imate in če to lahko storite brez težav. Nadaljujte z izpiranjem.
	FI	JOS KEMIKAALIA JOUTUU SILMIIN: Huuhdo huolellisesti vedellä usean minuutin ajan. Poista piilolinssit, _edical voi tehdä helposti. Jatka huuhtomista.
	SV	VID KONTAKT MED ÖGONEN: Skölj försiktigt med vatten i flera minuter. Ta ur eventuella kontaktlinser om det går lätt. Fortsätt att skölja.

P306 + P360	Language	
	BG	
	ES	EN CASO DE CONTACTO CON LA ROPA: Aclarar inmediatamente con agua abundante las prendas y la piel contaminadas antes de quitarse la ropa.
	CS	Při styku s oděvem: Kontaminovaný oděv a kůže oklamžit omyjte velkým množstvím vody a potom oděv odložte.
	DA	VED KONTAKT MED TØJET: Skyl omgående tilsmudset tøj og hud med rigeligt vand, før tøjet fjernes.

P306 + P360	Language	
	DE	BEI KONTAKT MIT DER KLEIDUNG: Kontaminierte Kleidung und Haut sofort mit viel Wasser abwaschen und danach Kleidung ausziehen.
	ET	RÕIVASTELE SATTUMISE KORRAL: saastunud rõivad ja nahk loputada viivitamata rohke veega ning alles seejärel rõivad eemaldada.
	EL	
	EN	IF ON CLOTHING: rinse immediately contaminated clothing and skin with plenty of water before removing clothes.
	FR	EN CAS DE CONTACT AVEC LES VÊTEMENTS: rincer immédiatement et abondamment avec de l'eau les vêtements contaminés et la peau avant de les enlever.
	GA	I gCÁS TEAGMHÁLA LE hÉADAÍ: sruthlaítear éadaí éillithe agus an craiceann láithreach le neart uisce sula ndéantar na héadaí a bhaint den duine.
	IT	IN CASO DI CONTATTO CON GLI INDUMENTI: sciacquare immediatamente e abbondantemente gli indumenti contaminati e la pelle prima di togliersi gli indumenti.
	LV	SASKAR• AR AP••RBU: nekav•joties izskalot pies•r•oto ap••rbu un •du ar lielu daudzumu •deni, pirms ap••rba novilkšanas.
	LT	PATEKUS ANT DRABUŽI• : Prieš nuvelkant užterštus drabužius, nedelsiant juos ir od• nuplauti dideliu kiekiu vandens.
	HU	HA RUHÁRA KERÜL: A ruhák levetése el•tt a szennyezett ruházatot és a b•rt b• vízzel azonnal le kell öblíteni.
	MT	JEKK FUQ L-ILBIES: la•la• mall-ewwel l-ilbies ikkontaminat u l•ilda b'•afna ilma qabel ma tne••i l-ilbies.
	NL	NA MORSEN OP KLEDING: verontreinigde kleding en huid onmiddellijk met veel water afspoelen en pas daarna kleding uittrekken.
	PL	W PRZYPADKU KONTAKTU Z ODZIE•• : natychmiast sp•uka• zanieczyszczon• odzie• i skór• du•• ilo•ci• wody przed zdj•ciem odzie•y.
	PT	SE ENTRAR EM CONTACTO COM A ROUPA: enxaguar imediatamente com muita água a roupa e a pele contaminadas antes de se despir.
	RO	ÎN CAZ DE CONTACT CU ÎMBR•C•MINTEA: cl•ti•i imediat îmbr•c•mintea contaminat••i pielea cu mult• ap•, înainte de scoaterea îmbr•c•mintei.

P306 + P360	Language	
	SK	PRI KONTAKTE S ODEVOM: kontaminovaný odev a pokožku opláchnite ve•kým množstvom vody a potom odev odstrá•te.
	SL	PRI STIKU Z OBLA•ILI: takoj izprati kontaminirana obla•ila in kožo z veliko vode pred odstranitvijo obla•il.
	FI	JOS KEMIKAALIA JOUTUU VAATTEISIIN: Huuhto saastunut vaatetus ja iho välittömästi runsaalla vedellä ennen vaatetuksen riisumista.
	SV	VID KONTAKT MED KLÄDERNA: Skölj omedelbart nedstänkta kläder och hud med mycket vatten innan du tar av dig kläderna.

P307 + P311	Language	
	BG	
	ES	EN CASO DE exposición: Llamar a un CENTRO DE INFORMACIÓN TOXICOLÓGICA o a un médico.
	CS	P•I expozici: Volejte TOXIKOLOGICKÉ INFORMA•NÍ ST•EDISKO nebo léka•e.
	DA	VED eksponering: Ring til en GIFTINFORMATION eller en læge.
	DE	BEI Exposition: GIFTINFORMATIONSZENTRUM oder Arzt anrufen.
	ET	Kokkupuute korral: võtta ühendust MÜRGISTUSTEABEKESKUSE või arstiga.
	EL	
	EN	IF exposed: Call a POISON CENTER or doctor/physician.
	FR	EN CAS d'exposition: appeler un CENTRE ANTIPOISON ou un médecin.
	GA	I gCÁS nochta: Cuir glao ar IONAD NIMHE nó ar dhochtúir/lia.
	IT	IN CASO di esposizione, contattare un CENTRO ANTIVELENI o un medico.
	LV	Ja ir saskar•: Sazin•ties ar SAIND•ŠAN•S CENTRU vai •rstu.
	LT	Esant s•ly•iui: Skambinti •APSINUODIJIM• KONTROL•S IR INFORMACIJOS BIUR• arba kreiptis •gydytoj•.
	HU	Expozíció esetén: forduljon TOXIKOLÓGIAI KÖZPONTHOZ vagy orvoshoz.

P307 + P311	Language	
	MT	Jekk espost: Ikkuntattja •ENTRU TA' L-AVVELENAMENT jew tabib.
	NL	NA blootstelling: een ANTIGIFCENTRUM of een arts raadplegen.
	PL	W przypadku nara•enia: Skontaktowa• si• z O•RODKIEM ZATRU• lub z lekarzem.
	PT	EM CASO DE exposi•o: contacte um CENTRO DE INFORMA•O ANTIVENENOS ou um m•dico.
	RO	ÎN CAZ DE expunere: suna•i la un CENTRU DE INFORMARE TOXICOLOGIC• sau un medic.
	SK	Po expozícii: volajte NÁRODNÉ TOXIKOLOGICKÉ INFORMA•NÉ CENTRUM alebo lekára.
	SL	PRI izpostavljenosti: pokli•ite CENTER ZA ZASTRUPITVE ali zdravnika.
	FI	Altistumisen tapahduttua: Ota yhteys MYRKYTYSTIETOKESKUKSEEN tai lääkäriin.
	SV	Om du exponerats: Kontakta GIFTINFORMATIONSCENTRAL eller läkare.

P308 + P313	Language	
	BG	••• : ••••••••••
	ES	EN CASO DE exposici•n manifiesta o presunta: Consultar a un m•dico.
	CS	P•I expozici nebo podez•en• na ni: Vyhledejte l•ka•skou pomoc/o•et•en•.
	DA	VED eksponering eller mistanke om eksponering: S•g l•gehj•lp.
	DE	BEI Exposition oder falls betroffen: •rztlichen Rat einholen/•rztliche Hilfe hinzuziehen.
	ET	Kokkupuute v•i kokkupuutekahtluse korral: p••rduda arsti poole.
	EL	
	EN	IF exposed or concerned: Get medical advice/attention.
	FR	EN CAS d'exposition prouv•e ou suspect•e: consulter un m•decin.
	GA	I gC•S nochta n• m• mheastar a bheith nochtaithe: Faigh comhairle/c•ram liachta.

P308 + P313	Language	
	IT	IN CASO di esposizione o di possibile esposizione, consultare un medico.
	LV	Ja nok••st saskar• vai saist•ts ar to: I•dziet medi•u pal•dz•bu.
	LT	Esant s•ly•iui arba jeigu numanomas s•lytis: kreiptis • gydytoj•.
	HU	Expozíció vagy annak gyanúja esetén: orvosi ellátást kell kérni.
	MT	Jekk espost jew kon•ernat: Ikkonsulta tabib.
	NL	NA (mogelijke) blootstelling: een arts raadplegen.
	PL	W przypadku nara•enia lub styczno•ci: Zasi•gn•• porady/zg•osi• si• pod opiek• lekarza.
	PT	EM CASO DE exposição ou suspeita de exposição: consulte um médico.
	RO	ÎN CAZ DE expunere sau de posibil• expunere: consulta•i medicul.
	SK	Po expozícii alebo podozrení z nej: Vyh•adajte lekársku pomoc/starostlivos•.
	SL	PRI izpostavljenosti ali sumu izpostavljenosti: poiš•ite zdravniško pomo•/oskrbo.
	FI	Altistumisen tapahduttua tai jos epäillään altistumista: Hakeudu lääkäriin.
	SV	Vid exponering eller misstanke om exponering Sök läkarhjälp.

P309 + P311	Language	
	BG	••• ••• : ••••••••
	ES	EN CASO DE exposición o si se encuentra mal: Llamar a un CENTRO DE INFORMACIÓN TOXICOLÓGICA o a un médico.
	CS	P•I expozici nebo necítíte-li se dob•e: Volejte TOXIKOLOGICKÉ INFORMA•NÍ ST•EDISKO nebo léka•e.
	DA	VED eksponering eller ubehag: Ring til en GIFTINFORMATION eller en læge.
	DE	BEI Exposition oder Unwohlsein: GIFTINFORMATIONSZENTRUM oder Arzt anrufen.
	ET	Kokkupuute või halva enesetunde korral: võtta ühendust MÜRGIKUSTEABEKESKUSE või arstiga.

P309 + P311	Language	
	EL	
	EN	IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.
	FR	EN CAS d'exposition ou de malaise: appeler un CENTRE ANTIPOISON ou un médecin.
	GA	I gCÁS nochtá nó má bhraitear tinn: Cuir glao ar IONAD NIMHE nó ar dhochtúir/lia.
	IT	IN CASO di esposizione o di malessere, contattare un CENTRO ANTIVELENI o un medico.
	LV	Ja nok•st saskar• vai jums ir slikta pašsaj•ta: sazinieties ar SAIND•ŠAN•S CENTRU vai •rstu.
	LT	Esant s•ly•iui arba pasijutus blogai: Skambinti • APSINUODIJIM• KONTROL•S IR INFORMACIJOS BIUR• arba kreiptis • gydytoj•.
	HU	Expozíció vagy rosszullét esetén: forduljon TOXIKOLÓGIAI KÖZPONTHOZ vagy orvoshoz:
	MT	JEKK espost jew t•ossok ma tifla•x: Ikkuntattja • ENTRU TA' L-AVVELENAMENT jew tabib.
	NL	NA blootstelling of bij onwel voelen: een ANTIGIFCENTRUM of een arts raadplegen.
	PL	W przypadku nara•enia lub z•ego samopoczucia: Skontaktowa• si• z O•RODKIEM ZATRU• lub z lekarzem.
	PT	EM CASO DE exposição ou de indisposição: contacte um CENTRO DE INFORMAÇÃO ANTIVENENOS ou um médico.
	RO	ÎN CAZ DE expunere sau dac• nu v• sim•i•i bine: suna•i la un CENTRU DE INFORMARE TOXICOLOGIC• sau un medic.
	SK	Po expozícii alebo pri zdravotných problémoch: volajte NÁRODNÉ TOXIKOLOGICKÉ INFORMA•NÉ CENTRUM alebo lekára.
	SL	PRI izpostavljenosti ali slabem po•utju: pokli•ite CENTER ZA ZASTRUPITVE ali zdravnika.
	FI	Altistumisen tapahduttua tai jos ilmenee pahoinvointia: Ota yhteys MYRKYTYSTIETOSKESKUKSEEN tai lääkäriin.
	SV	Vid exponering eller obehag: Kontakta GIFTINFORMATIONSCENTRAL eller läkare.

P332 + P313	Language	
	BG	••••••••••••••••••••
	ES	En caso de irritación cutánea: Consultar a un médico.
	CS	P•i podrážd•ní k•že: Vyhledejte léka•skou pomoc/ošet•ení.
	DA	Ved hudirritation: Søg lægehjælp.
	DE	Bei Hautreizung: Ärztlichen Rat einholen/ärztliche Hilfe hinzuziehen.
	ET	Nahaärrituse korral: pöörduda arsti poole.
	EL	
	EN	If skin irritation occurs: Get medical advice/attention.
	FR	En cas d'irritation cutanée: consulter un médecin.
	GA	I gcás greannú craicinn: Faigh comhairle/cúram liachta.
	IT	In caso di irritazione della pelle: consultare un medico.
	LV	Ja rodas •das iekaisums: I•dziet medi•u pal•dz•bu.
	LT	Jeigu sudirginama oda: kreiptis • gydytoj•.
	HU	B•rirritáció esetén: orvosi ellátást kell kérni.
	MT	Jekk ikun hemm irritazzjoni tal-•ilda: Ikkonsulta tabib.
	NL	Bij huidirritatie: een arts raadplegen.
	PL	W przypadku wyst•pienia podra•nienia skóry: Zasi•gn•• porady/zg•osi• si• pod opiek• lekarza.
	PT	Em caso de irritação cutânea: consulte um médico.
	RO	În caz de iritare a pielii: consulta•i medicul.
	SK	Ak sa objaví podráždenie pokožky, vyh•adajte lekársku pomoc/starostlivos•.
	SL	•e nastopi draženje kože: poiš•ite zdravniško pomo•/oskrbo.
	FI	Jos ilmenee ihoärsytystä: Hakeudu lääkäriin.
	SV	Vid hudirritation: Sök läkarhjälp.

P333 + P313	Language	
	BG	•••
	ES	En caso de irritación o erupción cutánea: Consultar a un médico.

P333 + P313	Language	
	CS	P•i podrážd•ní k•že nebo vyrážce: Vyhledejte léka•skou pomoc/ošet•ení.
	DA	Ved hudirritation eller udslet: Søg lægehjælp.
	DE	Bei Hautreizung oder -ausschlag: Ärztlichen Rat einholen/ärztliche Hilfe hinzuziehen.
	ET	Nahaärrituse või _obe korral: pöörduda arsti poole.
	EL	

P335 + P334	Language	
	CS	Volné částice odstraňte z kůže. Ponořte do studené vody/zabalte do vlhkého obvazu.
	DA	Børst løse partikler bort fra huden. Skyl under koldt vand/anvend våde omslag.
	DE	Lose Partikel von der Haut abbürsten. In kaltes Wasser tauchen/nassen Verband anlegen.
	ET	Pühkida lahtised osakesed nahalt maha. Hoida jahedas vees / panna peale niiske kompress.
	EL	
	EN	Brush off loose particles from skin. Immerse in cool water/wrap in wet bandages.
	FR	Enlever avec précaution les particules déposées sur la peau. Rincer à l'eau fraîche/poser une compresse humide.
	GA	Scuab cáithníní scaoilte den chraiceann. Tum in uisce fionnuar/cuir bréid fliuch air.
	IT	Rimuovere le particelle depositate sulla pelle. Immergere in acqua fredda/avvolgere con un bendaggio umido.
	LV	Noberziet brīvās daļiņas no ādas. Iegremdējiet vākus / ietiniet mitros apsūjos.
	LT	Neprilipusias daleles nuvalyti nuo odos. •merkti • v•s• vanden•/apvynioti šlapiais tvarsiais.
	HU	A b•rre tapadó szemcséket óvatosan le kell kefélni. Hideg vízzel/nedves kötéssel kell h•teni.
	MT	Farfar il-frak mhux imwa••al minn mal-•ilda. Da••al fl-ilma frisk/kebbeb f'faxex imxarrbin.
	NL	Losse deeltjes van de huid afvegen. In koud water onderdompelen/nat verband aanbrengen.
	PL	Nie zwi•zan• pozosta•o•• strzepn•• ze skóry. Zanurzy• w zimnej wodzie/owin•• mokrym banda•em.
	PT	Sacudir da pele as partículas soltas. Mergulhar em água fria/aplicar compressas húmidas.
	RO	Îndep•rta•i particulele depuse pe piele. Introduce•i în ap•rece/acoperi•i cu o compres• umed•.
	SK	Z pokožky oprášte sypké •iasto•ky. Ponorte do studenej vody/obviažte mokrými obvazmi.
	SL	S krta•o odstraniti razsute delce s kože. Potopiti v hladno vodo/zaviti v mokre povoje.

P335 + P334	Language	
	FI	Poista irtohiukkaset iholta. Upota kylmään veteen/kääri märkiin siteisiin.
	SV	Borsta bort lösa partiklar från huden. Skölj under kallt vatten/ använd våta omslag.

P337 + P313	Language	
	BG	...
	ES	Si persiste la irritación ocular: Consultar a un médico.
	CS	P•etrvává-li podrážd•ní o•í: Vyhledejte léka•skou pomoc/ošet•ení.
	DA	Ved vedvarende øjenirritation: Søg lægehjælp.
	DE	Bei anhaltender Augenreizung: Ärztlichen Rat einholen/ärztliche Hilfe hinzuziehen.
	ET	Kui silmade ärritus ei möödu: pöörduda arsti poole.
	EL	
	EN	If eye irritation persists: Get medical advice/attention.
	FR	Si l'irritation oculaire persiste: consulter un médecin.
	GA	Má mhaireann an greannú súile: Faigh comhairle/cúram liachta.
	IT	Se l'irritazione degli occhi persiste, consultare un medico.
	LV	Ja acu iekaisums nep•riet: I•dziet medi•u pal•dz•bu.
	LT	Jei aki• dirginimas nepraeina: kreiptis• gydytoj•.
	HU	Ha a szemirritáció nem múlik el: orvosi ellátást kell kérni.
	MT	Jekk l-irritazzjoni ta' l-g•ajnejn tippersisti: Ikkonsulta tabib.
	NL	Bij aanhoudende oogirritatie: een arts raadplegen.
	PL	W przypadku utrzymywania si• dzia•ania dra•ni•cego na oczu: Zasi•gn•• porady/zg•osi• si• pod opiek• lekarza.
	PT	Caso a irritação ocular persista: consulte um médico.
	RO	Dac• iritarea ochilor persist•: consulta•i medicul.
	SK	Ak podráždenie o•í pretrváva: vyh•adajte lekársku pomoc/starostlivos•.
	SL	• e draženje o•i ne preneha: poiš•ite zdravniško pomo•/oskrbo.
	FI	Jos silmä-ärsytys jatkuu: Hakeudu lääkäriin.
	SV	Vid bestående ögonirritation: Sök läkarhjälp.

P342 + P311	Language	
	BG	...
	ES	En caso de síntomas respiratorios: Llamar a un CENTRO DE INFORMACIÓN TOXICOLÓGICA o a un médico.
	CS	Při dýchacích potížích: Volejte TOXIKOLOGICKÉ INFORMAČNÍ STŘEDISKO nebo lékaře.
	DA	Ved luftvejssymptomer: Ring til en GIFTINFORMATION eller en læge.
	DE	Bei Symptomen der Atemwege: GIFTINFORMATIONSZENTRUM oder Arzt anrufen.
	ET	Hingamisteede probleemide ilmnemise korral: võtta ühendust MÜRGIKUSTEABEKESKUSE või arstiga.
	EL	
	EN	If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
	FR	En cas de symptômes respiratoires: appeler un CENTRE ANTIPOISON ou un médecin.
	GA	I gcás siomptóm riospráide: Cuir glao ar IONAD NIMHE nó ar dhochtúir/lia.
	IT	In caso di sintomi respiratori: contattare un CENTRO ANTIVELENI o un medico.
	LV	Ja rodas elpas traucējumi simptomi: sazinieties ar SAINDŠANŠU CENTRU vai ārstu.
	LT	Jeigu pasireiškia respiraciniai simptomai: skambinti APSINUODIJIMŲ KONTROLIS IR INFORMACIJOS BIURAS arba kreiptis gydytojų.
	HU	Légzési problémák esetén: forduljon TOXIKOLÓGIAI KÖZPONTHOZ vagy orvoshoz.
	MT	Jekk ikollok sintomi respiratorji: Ikkuntattja ENTRU TAL-AVVELENAMENT jew tabib.
	NL	Bij ademhalings symptomen: een ANTIGIFCENTRUM of een arts raadplegen.
	PL	W przypadku wystąpienia objawów ze strony układu oddechowego: Skontaktować się z OŚRODKIEM ZATRUŁ lub z lekarzem.
	PT	Em caso de sintomas respiratórios: contacte um CENTRO DE INFORMAÇÃO ANTIVENENOS ou um médico.

P342 + P311	Language	
	RO	În caz de simptome respiratorii: suna•i la un CENTRU DE INFORMARE TOXICOLOGIC • sau un medic.
	SK	Pri •ažkostiach s dýchaním: volajte NÁRODNÉ TOXIKOLOGICKÉ INFORMA•NÉ CENTRUM alebo lekára.
	SL	Pri respiratornih simptomih: pokli•ite CENTER ZA ZASTRUPITVE ali zdravnika.
	FI	Jos ilmenee hengitysoireita: Ota yhteys MYRKYTYSTIETOKESKUKSEEN tai lääkäriin.
	SV	Vid besvär i luftvägarna: Kontakta GIFTINFORMATIONSCENTRAL eller läkare.

P370 + P376	Language	
	BG	•••
	ES	En caso de incendio: Detener la fuga, si no hay peligro en hacerlo.
	CS	V p•ípad• požáru: Zastavte únik, m•žete-li tak u•init bez rizika.
	DA	Ved brand: Stands lækagen, hvis dette er sikkert.
	DE	Bei Brand: Undichtigkeit beseitigen, wenn gefahrlos möglich.
	ET	Tulekahju korral: leke peatada, kui seda on võimalik teha ohutult.
	EL	
	EN	In case of fire: Stop leak if safe to do so.
	FR	En cas d'incendie: obturer la fuite si cela peut se faire sans danger.
	GA	I gcás dóiteáin: Cuir stop leis an sceitheadh má tá sé sábháilte é sin a dhéanamh.
	IT	In caso di incendio: bloccare la perdita se non c'è pericolo.
	LV	Ugunsgr•ka gad•jum•: apturiet nopl•di, ja to dar•t ir droši.
	LT	Gaisro atveju: sustabdyti nuot•k•, jeigu galima saugiai tai padaryti.
	HU	T•z esetén: Meg kell szüntetni a szivárgást, ha ez biztonságosan megtehet•.
	MT	F'ka• ta' nar: Waqqaf it-tnixxija sakemm ma jkunx ta' periklu.
	NL	In geval van brand: het lek dichten als dat veilig gedaan kan worden.
	PL	W przypadku po•aru: Je•eli jest to bezpieczne zahamowa• wyciek.

P370 + P376	Language	
	PT	Em caso de incêndio: deter a fuga se tal puder ser feito em segurança.
	RO	În caz de incendiu: opri•i scurgerea, dac• acest lucru se poate face în siguran••.
	SK	V prípade požiaru: ak je to bezpečné, zastavte únik.
	SL	Ob požaru: zaustaviti puš•anje, •e je varno.
	FI	Tulipalon sattuessa: Sulje vuoto, jos sen voi tehdä turvallisesti.
	SV	Vid brand: Stoppa läckan om det kan göras på ett säkert sätt.

P370 + P378	Language	
	BG	: •• ... •• ••••••.
	ES	En caso de incendio: Utilizar ... para apagarlo.
	CS	V p•ípad• požáru: K hašení použijte
	DA	Ved brand: Anvend ... til brandslukning.
	DE	Bei Brand: ... zum Löschen verwenden.
	ET	Tulekahju korral: kasutada kustutamiseks
	EL	
	EN	In case of fire: Use ... for extinction.
	FR	En cas d'incendie: utiliser ... pour l'extinction.
	GA	I gcás dóiteáin: Úsáid ... le haghaidh múchta.
	IT	In caso di incendio: estinguere con....
	LV	Ugunsgr•ka gad•jum•: dz•šanai izmantojiet ...
	LT	Gaisro atveju: gesinimui naudoti ...
	HU	T•z esetén: az oltáshoz ...használandó.
	MT	F'ka• ta' nar: U•a' ... g•at-tifi.
	NL	In geval van brand: blussen met ...
	PL	W przypadku po•aru: U•y• ... do gaszenia.
	PT	Em caso de incêndio: para a extinção utilizar ...
	RO	În caz de incendiu: utiliza•i... pentru stingere.
	SK	V prípade požiaru: na hasenie použite
	SL	Ob požaru: za gašenje uporabiti ...
	FI	Tulipalon sattuessa: Käytä palon sammuttamiseen ...
	SV	Vid brand: Släck branden med

P370 + P380	Language	
	BG	.....
	ES	En caso de incendio: Evacuar la zona.
	CS	V p•ípad• požáru: Vykli•te prostor.
	DA	Ved brand: Evakuer området.
	DE	Bei Brand: Umgebung räumen.
	ET	Tulekahju korral: ala evakueerida.
	EL	
	EN	In case of fire: Evacuate area.
	FR	En cas d'incendie: évacuer la zone.
	GA	I gcás dóiteáin: Aslonnaigh gach duine as an limistéar.
	IT	Evacuare la zona in caso di incendio.
	LV	Ugunsgr•ka gad•jum•: evaku•t zonu.
	LT	Gaisro atveju: evakuoti zon•.
	HU	T•z esetén: Ki kell üríteni a területet.
	MT	F'ka• ta' nar: Evakwa ••ona.
	NL	In geval van brand: evacueren.
	PL	W przypadku po•aru: Ewakuowa• teren.
	PT	Em caso de incêndio: evacuar a zona.
	RO	În caz de incendiu: evacua•i zona.
	SK	V prípade požiaru: priestory evakuujte.
	SL	Ob požaru: izprazniti obmo•je.
	FI	Tulipalon sattuesssa: Evakuoi alue.
	SV	Vid brand: Utrym området.

P370 + P380 + P375	Language	
	BG	..... ..
	ES	En caso de incendio: Evacuar la zona. Luchar contra el incendio a distancia, dado el riesgo de explosión.

P370 + P380 + P375	Language	
	CS	V p•ípad• požáru: Vykli•te prostor. Kv•li nebezpe•í výbuchu haste z dostate•né vzdálenosti.
	DA	Ved brand: Evakuer området. Bekæmp branden på afstand på grund af eksplosionsfare.
	DE	Bei Brand: Umgebung räumen. Wegen Explosionsgefahr Brand aus der Entfernung bekämpfen.
	ET	Tulekahju korral: ala evakueerida. Plahvatusohu tõttu teha kustutustõid eemalt.
	EL	••••••••.
	EN	In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion.
	FR	En cas d'incendie: évacuer la zone. Combattre l'incendie à distance à cause du risque d'explosion.
	GA	I gcás dóiteáin: Aslonnaigh gach duine as an limistéar. Téigh i gcianghleic leis an dóiteán mar gheall ar an mbaol pléasctha.
	IT	In caso di incendio: evacuare la zona. Rischio di esplosione. Utilizzare i mezzi estinguenti a grande distanza.
	LV	Ugunsgr•ka gad•jum•: evaku•t zonu. Dz•st uguni no att•luma eksplozijas riska d••.
	LT	Gaisro atveju: evakuoti zon•. Gaisr• gesinti iš toli d•l sprogimo pavojaus.
	HU	T•z esetén: Ki kell üríteni a területet. A t•z oltását robbanásveszély miatt távolból kell végezni.
	MT	F'ka• ta' nar: Evakwa •••ona. Itfi n-nar mill-bog•od min•abba r-riskju ta' splu•joni.
	NL	In geval van brand: evacueren. Op afstand blussen omwille van ontploffingsgevaar.
	PL	W przypadku po•aru: Ewakuowa• teren. Z powodu ryzyka wybuchu gasi• po•ar z odleg•oci.
	PT	Em caso de incêndio: evacuar a zona. Combater o incêndio à distância, devido ao risco de explosão.
	RO	În caz de incendiu: evacua•i zona. Sting•i incendiul de la distan••din cauza pericolului de explozie.
	SK	V prípade požiaru: priestory evakuujte. Z dôvodu nebezpe•enstva výbuchu požiar haste z dia•ky.

P370 + P380 + P375	Language	
	SL	Ob požaru: izprazniti območje. Gasiti z vodo je razdalje zaradi nevarnosti eksplozije.
	FI	Tulipalon sattuesssa: Evakuoi alue. Sammuta palo etäältä räjähdysvaaran takia.
	SV	Vid brand: Utrym området. Bekämpa branden på avstånd på grund av explosionsrisken.

P371 + P380 + P375	Language	
	BG	...
	ES	En caso de incendio importante y en grandes cantidades: Evacuar la zona. Luchar contra el incendio a distancia, dado el riesgo de explosión.
	CS	V případě velkého požáru a velkého množství: Vykliďte prostor. Kvůli nebezpečí výbuchu haste z dostatečné vzdálenosti.
	DA	Ved større brand og store mængder: Evakuer området. Bekæmp branden på afstand på grund af eksplosionsfare.
	DE	Bei Großbrand und großen Mengen: Umgebung räumen. Wegen Explosionsgefahr Brand aus der Entfernung bekämpfen.
	ET	Suure tulekahju korral ning kui on tegemist suurte kogustega: ala evakueerida. Plahvatusohu tõttu teha kustutustööd eemalt.
	EL	
	EN	In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.
	FR	En cas d'incendie important et s'il s'agit de grandes quantités: évacuer la zone. Combattre l'incendie à distance à cause du risque d'explosion.
	GA	I gcás mórdhóiteáin agus mórchainníochtaí: Aslonnaigh gach duine as an limistéar. Téigh i gcianghleic leis an dóiteán mar gheall ar an mbaol pléasctha.
	IT	In caso di incendio grave e di grandi quantità: evacuare la zona. Rischio di esplosione. Utilizzare i mezzi estinguenti a grande distanza.
	LV	Ugunsgrāka vai liela apjoma gadījumā: evakuēt zonu. Dzīst uguni no attāluma eksplozijas riska dēļ.
	LT	Didelio gaisro ir dideli kiekiai atveju: evakuoti zonos. Gaisrą gesinti iš toli dėl sprogimo pavojaus.
	HU	Nagyobb tűz és nagy mennyiség esetén: Ki kell üríteni a területet. A tűz oltását robbanásveszély miatt távolból kell végezni.
	MT	F'ka ta' nar kbir u kwantitajiet kbar: Evakwa l-ona. Itfi n-nar mill-bogod min-abba r-riskju ta' spluġjoni.
	NL	In geval van grote brand en grote hoeveelheden: evacueren. Op afstand blussen omwille van ontploffingsgevaar.

P371 + P380 + P375	Language	
	PL	W przypadku powa•nego po•aru i du•ych ilo•ci: Ewakuowa• teren. Z powodu ryzyka wybuchu gasi• po•ar z odleg•o•ci.
	PT	Em caso de incêndio importante e de grandes quantidades: evacuar a zona. Combater o incêndio à distância, devido ao risco de explosão.
	RO	În caz de incendiu de propor•ii •i de cantit••i mari de produs: evacua•i zona. Stinge•i incendiul de la distan•• din cauza pericolului de explozie.
	SK	V prípade ve•kého požiaru a zna•ného množstva: priestory evakuujte. Z dôvodu nebezpe•enstva výbuchu požiar haste z dia•ky.
	SL	Ob velikem požaru in velikih koli•inah: izprazniti obmo•je. Gasiti z ve•je razdalje zaradi nevarnosti eksplozije.
	FI	Jos tulipalo ja ainemäärät ovat suuret: Evakuoi alue. Sammuta palo etäältä räjähdysvaaran takia.
	SV	Vid större brand och stora mängder: Utrym området. Bekämpa branden på avstånd på grund av explosionsrisken.

Table 1.4
Precautionary statements – Storage

P401	Language	
	BG	
	ES	Almacenar ...
	CS	Skladujte ...
	DA	Opbevarer ...
	DE	... aufbewahren.
	ET	Hoida ...
	EL	
	EN	Store ...
	FR	Stocker ...
	GA	Stóráil ...
	IT	Conservare...
	LV	Glab•t...
	LT	Laikyti...
	HU	Tárolás:
	MT	A••en ...
	NL	... bewaren.
	PL	Przechowywa• ...
	PT	Armazenar ...
	RO	A se depozita...
	SK	Uchovávaťe ...
	SL	Hraniti ...
	FI	Varastoi ...
	SV	Förvaras ...

P402	Language	
	BG	••••• ••••••••••.
	ES	Almacenar en un lugar seco.
	CS	Skladujte na suchém míst•.
	DA	Opbevarer et tørt sted.
	DE	An einem trockenen Ort aufbewahren.
	ET	Hoida kuivas.
	EL	

P402	Language	
	EN	Store in a dry place.
	FR	Stocker dans un endroit sec.
	GA	Stóráil in áit thirim.
	IT	Conservare in luogo asciutto.
	LV	Glab•t saus• viet•.
	LT	Laikyti sausoje vietoje.
	HU	Száraz helyen tárolandó.
	MT	A••en f'post niexef.
	NL	Op een droge plaats bewaren.
	PL	Przechowywa• w suchym miejscu.
	PT	Armazenar em local seco.
	RO	A se depozita într-un loc uscat.
	SK	Uchovávaťe na suchom mieste.
	SL	Hraniti na suhem.
	FI	Varastoi kuivassa paikassa.
	SV	Förvaras torrt.

P403	Language	
	BG	••••• •••••• •••••.
	ES	Almacenar en un lugar bien ventilado.
	CS	Skladujte na dob•e v•traném míst•.
	DA	Opbevares på et godt ventileret sted.
	DE	An einem gut belüfteten Ort aufbewahren.
	ET	Hoida hästi ventileeritavas kohas.
	EL	
	EN	Store in a well-ventilated place.
	FR	Stocker dans un endroit bien ventilé.
	GA	Stóráil in áit dhea-aeráilte.
	IT	Conservare in luogo ben ventilato.
	LV	Glab•t labi v•din•m• viet•.
	LT	Laikyti gerai v•dinamoje vietoje.
	HU	Jól szell•z• helyen tárolandó.
	MT	A••en f'post b'ventilazzjoni tajba.
	NL	Op een goed geventileerde plaats bewaren.
	PL	Przechowywa• w dobrze wentylowanym miejscu.

P403	Language	
	PT	Armazenar em local bem ventilado.
	RO	A se depozita într-un spațiu bine ventilat.
	SK	Uchovávať na dobre vetranom mieste
	SL	Hraniti na dobro prezračevanem mestu.
	FI	Varastoi paikassa, jossa on hyvä ilmanvaihto.
	SV	Förvaras på väl ventilerad plats.

P404	Language	
	BG	••••• • •••
	ES	Almacenar en un recipiente cerrado.
	CS	Skladujte v uzavřeném obalu.
	DA	Opbevares i en lukket beholder.
	DE	In einem geschlossenen Behälter aufbewahren.
	ET	Hoida suletud mahutis.
	EL	
	EN	Store in a closed container.
	FR	Stocker dans un récipient fermé.
	GA	Stóráil i gcoimeádán iata.
	IT	Conservare in un recipiente chiuso.
	LV	Glabāt slēgtā tvertnē.
	LT	Laikyti uždaroje talpykloje.
	HU	Zárt edényben tárolandó.
	MT	Affien f'kontenitur magħluq.
	NL	In gesloten verpakking bewaren.
	PL	Przechowywać w zamkniętym pojemniku.
	PT	Armazenar em recipiente fechado.
	RO	A se depozita într-un recipient închis.
	SK	Uchovávať v uzavretej nádobe.
	SL	Hraniti v zaprti posodi.
	FI	Varastoi suljettuna.
	SV	Förvaras i sluten behållare.

P405	Language	
	BG	••••• ••••••.
	ES	Guardar bajo llave.
	CS	Skladujte uzam•ené.
	DA	Opbevares under lås.
	DE	Unter Verschluss aufbewahren.
	ET	Hoida lukustatult.
	EL	
	EN	Store locked up.
	FR	Garder sous clef.
	GA	Stóráil faoi ghlás.
	IT	Conservare sotto chiave.
	LV	Glab•t sl•gt• veid•.
	LT	Laikyti užrakint•.
	HU	Elzárva tárolandó.
	MT	A••en f'post imsakkar.
	NL	Achter slot bewaren.
	PL	Przechowywa• pod zamkni•ciem.
	PT	Armazenar em local fechado à chave.
	RO	A se depozita sub cheie.
	SK	Uchovávaťe uzamknuté.
	SL	Hraniti zaklenjeno.
	FI	Varastoi lukitussa tilassa.
	SV	Förvaras inlåst.

P406	Language	
	BG	••••• • •• /... •••••
	ES	Almacenar en un recipiente resistente a la corrosión / ... con revestimiento interior resistente.
	CS	Skladujte v obalu odolném proti korozi/ ... obalu s odolnou vnit•ní vrstvou.
	DA	Opbevares i ætsningsbestandig/...beholder med modstandsdygtig indvendig belægning.
	DE	In korrosionsbeständigem/... Behälter mit korrosionsbeständiger Auskleidung aufbewahren.
	ET	Hoida sööbekindlas/...sööbekindla sisevooderdisega mahutis.

P406	Language	
	EL	
	EN	Store in corrosive resistant/... container with a resistant inner liner.
	FR	Stocker dans un récipient résistant à la corrosion/récipient en ... avec doublure intérieure résistant à la corrosion.
	GA	Stóráil i gcoimeádán ... frithchreimneach/... le líneáil frithchreimneach laistigh.
	IT	Conservare in recipiente resistente alla corrosione/... provvisto di rivestimento interno resistente.
	LV	Glab•t tvertn•, kas aizsarg• pret koroziju/ ... tvertnes ar iekš•jo pretkorozijas izol•ciju.
	LT	Laikyti korozijai atsparioje talpykloje/..., turin•ioje atspari• vidin• dang•.
	HU	Saválló/saválló bélés• ... edényben tárolandó.
	MT	A••en f'post re•istenti g•all-korru•joni/... kontenitur li huwa infurrat minn •ewwa b'materjal re•istenti.
	NL	In corrosiebestendige/... houder met corrosiebestendige binnenbekleding bewaren.
	PL	Przechowywa• w pojemniku odpornym na korozj• /... o odpornej pow•o•ce wewn•trznej.
	PT	Armazenar num recipiente resistente à corrosão/... com um revestimento interior resistente.
	RO	Depozita•i într-un recipient rezistent la coroziune/recipient din... cu dublur• interioar• rezistent• la coroziune.
	SK	Uchovávať v nádobe odolnej proti korózii/... nádobe s odolnou vnútornou vrstvou.
	SL	Hraniti v posodi, odporni proti koroziji/..., z odporno notranjo oblogo.
	FI	Varastoi syöpymättömässä/... säiliössä, jossa on kestävä sisävuoraus.
	SV	Förvaras i korrosionsbeständig/... behållare med beständigt innerhölje.

P407	Language	
	BG	••••• /••••••••••.
	ES	Dejar una separación entre los bloques/los palés de carga.
	CS	Mezi stohy/paletami ponechte vzduchovou mezeru.
	DA	Obevares med luftmellemrum mellem stakkene/pallerne.

P410	Language	
	MT	Ipprote•i mid-dawl tax-xemx.
	NL	Tegen zonlicht beschermen.
	PL	Chroni• przed •wiat•em s•onecznym.
	PT	Manter ao abrigo da luz solar.
	RO	A se proteja de lumina solar•.
	SK	Chr•te pred slne•ným žiarením.
	SL	Zaš•ititi pred son•no svetlobo.
	FI	Suojaa auringonvalolta.
	SV	Skyddas från solljus.

P411	Language	
	BG	••••• ••• , •••••••••••••• ••• °C/...°F.
	ES	Almacenar a temperaturas no superiores a ...°C / ...°F.
	CS	Skladujte p•i teplot• nep•esahující ...°C/...°F.
	DA	Opbevares ved en temperatur, som ikke overstiger ...°C/...°F.
	DE	Bei Temperaturen von nicht mehr als ...°C/... aufbewahren.
	ET	Hoida temperatuuril mitte üle ... °C/... °F.
	EL	...°C/...°F.
	EN	Store at temperatures not exceeding ...°C/...°F.
	FR	Stocker à une température ne dépassant pas ... °C/... °F.
	GA	Stóráil ag teocht nach airde ná ...°C/...°F.
	IT	Conservare a temperature non superiori a ...°C/...°F.
	LV	Uzglab•t temperat•r•, kas nep•rsniedz ...°C/...°F.
	LT	Laikyti ne aukštesn•je kaip ...°C/...°F temperat•roje.
	HU	A tárolási h•mérséklet legfeljebb ...°C/...°F lehet.
	MT	A••en f•temperaturi li ma je••edux ...°C/...°F.
	NL	Bij maximaal ... °C/...°F bewaren.
	PL	Przechowywa• w temperaturze nieprzekraczaj•cej ...°C/...°F.
	PT	Armazenar a uma temperatura não superior a ...°C/...°F.
	RO	A se depozita la temperaturi care s• nu dep•easc• ...°C/...°F.
	SK	Uchovávajúte pri teplotách do ... °C/...°F
	SL	Hraniti pri temperaturi do ... °C/... °F.
	FI	Varastoi alle ...°C/...°F lämpötilassa.
	SV	Förvaras vid högst ...°C/...°F.

P413	Language	
	DE	Schüttgut in Mengen von mehr als ... kg bei Temperaturen von nicht mehr als ... °C aufbewahren
	ET	Kogust, mis on suurem kui ... kg/ ... naela, hoida temperatuuril mitte üle ... °C/... °F.
	EL	kg/... lbs C/...°F.
	EN	Store bulk masses greater than ... kg/... lbs at temperatures not exceeding ...°C/...°F.
	FR	Stocker les quantités en vrac de plus de ... kg/... lb à une température ne dépassant pas ... °C/... °F.
	GA	Stóráil bulcmhaiseanna os cionn ... kg/... lb ag teocht nach airde ná ... °C/...°F.
	IT	Conservare le rinfuse di peso superiore a .....kg/.....lb a temperature non superiori a ... °C/..°F.
	LV	Lielus apjomus, kas p•rsniedz ... kg/ ... lbs, uzglab•t temperat•r•, kas nep•rsniedz ... °C/... °F.
	LT	Didesnius kaip ... kg/... lbs medžiagos kiekius laikyti ne aukštesn•je kaip ... °C/... °F temperat•roje.
	HU	A ... kg/... lb tömeget meghaladó ömlesztett anyag tárolási h•mérséklete legfeljebb ... °C/... °F lehet.
	MT	A••en il-kwantitajiet f' massa ta' akbar minn ... kg/... lbs f' temperaturi ta' mhux aktar minn ... °C/... °F.
	NL	Bulkmateriaal, indien meer dan ... kg/... lbs, bij temperaturen van maximaal ... °C bewaren.
	PL	Przechowywa• luzem masy przekraczaj•ce ... kg/... funtów w temperaturze nieprzekraczaj•cej ... °C/... °F.
	PT	Armazenar quantidades a granel superiores a ... kg/... lbs a uma temperatura não superior a ... °C/... °F.
	RO	Depozita•i cantit•ile în vrac mai mari de ... kg/... lbs la temperaturi care s• nu dep•easc• ... °C/... °F.
	SK	Ve•ké množstvo s hmotnos•ou nad ... kg/... lbs uchovávajúte pri teplote do ... °C/ ... °F.
	SL	Razsute koli•ine, ve•je od ... kg/... lbs, hraniti pri temperaturi do ... °C/... °F.
	FI	Säilytä yli ... kg/...lbs painoinen irtotavara enintään ... °C/... °F lämpötilassa.
	SV	Bulkprodukter som väger mer än ... kg/ ... lbs förvaras vid högst ... °C/... °F.

P420	Language	
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P420	Language	
	BG	••••• •• ••••••
	ES	Almacenar alejado de otros materiales.
	CS	Skladujte odd•len• od ostatních materiál•.
	DA	Må ikke opbevares i nærheden af andre materialer.
	DE	Von anderen Materialien entfernt aufbewahren.
	ET	Hoida eemal teistest materjalidest.
	EL	
	EN	Store away from other materials.
	FR	Stocker à l'écart des autres matières.
	GA	Stóráil glan ar ábhair eile.
	IT	Conservare lontano da altri materiali.
	LV	Glab•t atseviš•i no citiem materi•liem.
	LT	Laikyti atokiau nuo kit• medžiag•.
	HU	Más anyagoktól távol tárolandó.
	MT	A••en 'l bog•od minn materjal ie•or.
	NL	Gescheiden van ander materiaal bewaren.
	PL	Przechowywa• z dala od innych materia•ów.
	PT	Armazenar afastado de outros materiais.
	RO	Depozita•i departe de alte materiale.
	SK	Uchovávať oddelene od iných materiálov.
	SL	Hraniti lo•eno od drugih materialov.
	FI	Varastoi erillään muista materiaaleista.
	SV	Förvaras åtskilt från andra material.

P422	Language	
	BG	•••...
	ES	Almacenar el contenido en ...
	CS	Skladujte pod ...
	DA	Indholdet skal opbevares under ...
	DE	Inhalt in/unter ... aufbewahren
	ET	Hoida sisu
	EL	
	EN	Store contents under ...
	FR	Stocker le contenu sous ...
	GA	Stóráil an t-ábhar faoi ...

P422	Language	
	IT	Conservare sotto...
	LV	Saturu uzglab•t zem...
	LT	Turin• laikyti ...
	HU	Tartalma ... -ban/-ben tárolandó.
	MT	A••en il-kontenut ta•t ...
	NL	Onder ... bewaren.
	PL	Zawarto•• przechowywa• w ...
	PT	Armazenar o conteúdo em ...
	RO	Depozita•i con•inutul sub ...
	SK	Obsah uchovávajte v
	SL	Vsebino hraniti v ...
	FI	Varastoi sisältö ...
	SV	Förvara innehållet i...

P402 + P404	Language	
	BG	••••• , ••••• •••.
	ES	Almacenar en un lugar seco. Almacenar en un recipiente cerrado.
	CS	Skladujte na suchém míst•. Skladujte v uzav•eném obalu.
	DA	Opbevares et tørt sted. Opbevares i en lukket beholder.
	DE	In einem geschlossenen Behälter an einem trockenen Ort aufbewahren.
	ET	Hoida kuivas. Hoida suletud mahutis.
	EL	
	EN	Store in a dry place. Store in a closed container.
	FR	Stocker dans un endroit sec. Stocker dans un récipient fermé.
	GA	Stóráil in áit thirim. Stóráil i gcoimeadán iata.
	IT	Conservare in luogo asciutto e in recipiente chiuso.
	LV	Glab•t saus• viet•. Glab•t aizv•rt• tvertn•.
	LT	Laikyti sausoje vietoje. Laikyti uždaroje talpykloje.
	HU	Száraz helyen tárolandó. Zárt edényben tárolandó.
	MT	A••en f'post niexef. A••en f'kontenitur mag•luq.
	NL	Op een droge plaats bewaren. In gesloten verpakking bewaren.
	PL	Przechowywa• w suchym miejscu. Przechowywa• w zamkni•tym pojemniku.

P402 + P404	Language	
	PT	Armazenar em local seco. Armazenar em recipiente fechado.
	RO	A se depozita într-un loc uscat, într-un recipient închis.
	SK	Uchovávať na suchom mieste. Uchovávať v uzavretej nádobe.
	SL	Hraniti na suhem. Hraniti v zaprti posodi.
	FI	Varastoi kuivassa paikassa. Varastoi suljettuna.
	SV	Förvaras torrt. Förvaras i sluten behållare.

P403 + P233	Language	
	BG	••••• ••.
	ES	Almacenar en un lugar bien ventilado. Mantener el recipiente cerrado herméticamente.
	CS	Skladujte na dob•e v•traném míst•. Uchovávejte obal t•sn• uzav•ený.
	DA	Opbevares på et godt ventileret sted. Hold beholderen tæt lukket.
	DE	Behälter dicht verschlossen an einem gut belüfteten Ort aufbewahren.
	ET	Hoida hästi ventileeritavas kohas. Hoida mahuti tihedalt suletuna.
	EL	
	EN	Store in a well-ventilated place. Keep container tightly closed.
	FR	Stocker dans un endroit bien ventilé. Maintenir le récipient fermé de manière étanche.
	GA	Stóráil in áit dhea-aeráilte. Coimeád an coimeádán dúnta go docht.
	IT	Tenere il recipiente ben chiuso e in luogo ben ventilato.
	LV	Glab•t labi v•din•m•s telp•s. Tvertni tur•t cieši nosl•gtu.
	LT	Laikyti gerai v•dinamoje vietoje. Talpykl• laikyti sandariai uždaryt•.
	HU	Jól szell•z• helyen tárolandó. Az edény szorosan lezárva tartandó.
	MT	A••en f'post b'ventilazzjoni tajba. •omm il-kontenitur mag•luq sew.
	NL	Op een goed geventileerde plaats bewaren. In goed gesloten verpakking bewaren.
	PL	Przechowywa• w dobrze wentylowanym miejscu. Przechowywa• pojemnik szczelnie zamkni•ty.
	PT	Armazenar em local bem ventilado. Manter o recipiente bem fechado.

P403 + P233	Language	
	RO	A se depozita într-un spa•iu bine ventilat. P•stra•i recipientul închis etan•.
	SK	Uchovávajte na dobre vetranom mieste. Nádobu uchovávajte tesne uzavretú.
	SL	Hraniti na dobro prezra•evanem mestu. Hraniti v tesno zaprti posodi.
	FI	Varastoi paikassa, jossa on hyvä ilmanvaihto. Säilytä tiiviisti suljettuna.
	SV	Förvaras på väl ventilerad plats. Förpackningen ska förvaras väl tillsluten.

P403 + P235	Language	
	BG	••••• ••••••••••.
	ES	Almacenar en un lugar bien ventilado. Mantener en lugar fresco.
	CS	Skladujte na dob•e v•traném míst•. Uchovávejte v chladu.
	DA	Opbevares på et godt ventileret sted. Opbevares køligt.
	DE	Kühl an einem gut belüfteten Ort aufbewahren.
	ET	Hoida hästi ventileeritavas kohas. Hoida jahedas.
	EL	
	EN	Store in a well-ventilated place. Keep cool.
	FR	Stocker dans un endroit bien ventilé. Tenir au frais.
	GA	Stóráil in áit dhea-aeráilte. Coimeád fionnuar.
	IT	Conservare in luogo fresco e ben ventilato.
	LV	Glab•t labi v•din•m•s telp•s. Tur•t v•sum•.
	LT	Laikyti gerai v•dinamoje vietoje. Laikyti v•sioje vietoje.
	HU	Jól szell•z• helyen tárolandó. H•vös helyen tartandó.
	MT	A••en f'post b'ventilazzjoni tajba. •omm frisk.
	NL	Op een goed geventileerde plaats bewaren. Koel bewaren.
	PL	Przechowywa• w dobrze wentylowanym miejscu. Przechowywa• w ch•odnym miejscu.
	PT	Armazenar em local bem ventilado. Conservar em ambiente fresco.
	RO	A se depozita într-un spa•iu bine ventilat. A se p•stra la rece.
	SK	Uchovávajte na dobre vetranom mieste. Uchovávajte v chlade.
	SL	Hraniti na dobro prezra•evanem mestu. Hraniti na hladnem.

P403 + P235	Language	
	FI	Varastoi paikassa, jossa on hyvä ilmanvaihto. Säilytä viileässä.
	SV	Förvaras på väl ventilerad plats. Förvaras svalt.

P410 + P403	Language	
	BG	••••• •••••
	ES	Proteger de la luz del sol. Almacenar en un lugar bien ventilado.
	CS	Chraňte před slunečním zářením. Skladujte na dobře větraném místě.
	DA	Beskyttes mod sollys. Opbevares på et godt ventileret sted.
	DE	Vor Sonnenbestrahlung geschützt an einem gut belüfteten Ort aufbewahren.
	ET	Hoida päikesevalguse eest. Hoida hästi ventileeritavas kohas.
	EL	
	EN	Protect from sunlight. Store in a well-ventilated place.
	FR	Protéger du rayonnement solaire. Stocker dans un endroit bien ventilé.
	GA	Cosain ó sholas na gréine. Stóráil in áit dhea-aeráilte.
	IT	Proteggere dai raggi solari. Conservare in luogo ben ventilato.
	LV	Aizsargāt no saules gaismas. Glabāt labi vēdināms telpās.
	LT	Saugoti nuo saulės šviesos. Laikyti gerai vėdinamoje vietoje.
	HU	Napfénytől védendő. Jól szellőző helyen tárolandó.
	MT	Ipptej i mid-dawl tax-xemx. Aqen f'post b'ventilazzjoni tajba.
	NL	Tegen zonlicht beschermen. Op een goed geventileerde plaats bewaren.
	PL	Chronić przed światłem słonecznym. Przechowywać w dobrze wentylowanym miejscu.
	PT	Manter ao abrigo da luz solar. Armazenar em local bem ventilado.
	RO	A se proteja de lumina solar. A se depozita într-un spațiu bine ventilat.
	SK	Chránite pred slnečným žiarením. Uchovávať na dobre vetranom mieste.
	SL	Zaščititi pred sonno svetlobo. Hraniti na dobro prezraevanem mestu.

P410 + P403	Language	
	FI	Suojaa auringonvalolta. Varastoi paikassa, jossa on hyvä ilmanvaihto.
	SV	Skyddas från solljus. Förvaras på väl ventilerad plats.

P410 + P412	Language	
	BG	••••• •, ••-•••••••••• 50°C/ 122°F.
	ES	Proteger de la luz del sol. No exponer a temperaturas superiores a 50°C / 122°F.
	CS	Chraňte před slunečním zářením. Nevystavujte teplotě přesahující 50°C/ 122°F.
	DA	Beskyttes mod sollys. Må ikke udsættes for en temperatur, som overstiger 50°C/ 122°F.
	DE	Vor Sonnenbestrahlung schützen und nicht Temperaturen von mehr als 50°C aussetzen.
	ET	Hoida päikesevalguse eest. Mitte hoida temperatuuril üle 50 °C/ 122 °F.
	EL	C/ 122°F.
	EN	Protect from sunlight. Do not expose to temperatures exceeding 50°C/ 122°F.
	FR	Protéger du rayonnement solaire. Ne pas exposer à une température supérieure à 50 °C/122 °F.
	GA	Cosain ó sholas na gréine. Ná nocht do theocht níos airde ná 50°C/122°F.
	IT	Proteggere dai raggi solari. Non esporre a temperature superiori a 50°C/122°F.
	LV	Aizsargāt no saules gaismas. Nepakāut temperatūrai, kas pārsniedz 50°C/ 122°F.
	LT	Saugoti nuo saulės šviesos. Nelaikyti aukštesnėje kaip 50°C/ 122°F temperatūroje.
	HU	Napfénytől védendő. Nem érheti 50°C/122°F hőmérsékletet meghaladó hő.
	MT	Ipprotegi mid-dawl tax-xemx. Tesponix għal temperatura li teendi li 50°C/ 122°F.
	NL	Tegen zonlicht beschermen. Niet blootstellen aan temperaturen boven 50°C/ 122°F.

P410 + P412	Language	
	PL	Chroni• przed •wiat•em s•onecznym. Nie wystawia• na dzia•anie temperatury przekraczaj•cej 50 °C/122 °F.
	PT	Manter ao abrigo da luz solar. Não expor a temperaturas superiores a 50°C/ 122°F.
	RO	A se proteja de lumina solar•. Nu expune•i la temperaturi care dep•esc 50 °C/ 122 °F.
	SK	Chr•te pred slne•ným žiarením. Nevystavujte teplotám nad 50 °C/ 122 °F.
	SL	Zaš•ititi pred son•no svetlobo. Ne izpostavljati temperaturam nad 50 °C/122 °F.
	FI	Suojaa auringonvalolta. Ei saa altistaa yli 50 °C/ 122 °F lämpötiloille.
	SV	Skyddas från solljus. Får inte utsättas för temperaturer över 50 °C/ 122 °F.

P411 + P235	Language	
	BG	..... °C / ... °F.
	ES	Almacenar a temperaturas no superiores a ... °C / ... °F. Mantener en lugar fresco.
	CS	Skladujte p•i teplot• nep•esahující ... °C/... °F. Uchovávejte v chladu.
	DA	Opbevares ved en temperatur, som ikke overstiger ... °C/... °F. Opbevares køligt.
	DE	Kühl und bei Temperaturen von nicht mehr als ... °C aufbewahren.
	ET	Hoida temperatuuril mitte üle ... °C/... °F. Hoida jahedas.
	EL	... °C/... °F.
	EN	Store at temperatures not exceeding ... °C/... °F. Keep cool.
	FR	Stocker à une température ne dépassant pas ... °C/... °F. Tenir au frais.
	GA	Stóráil ag teocht nach airde ná ... °C/... °F. Coimeád fionnuar.
	IT	Conservare in luogo fresco a temperature non superiori a °C/... °F.
	LV	Glab•t temperat•r•, kas nep•rsniedz ... °C/... °F. Tur•t v•sum•.

P411 + P235	Language	
	LT	Laikyti ne aukštesnėje kaip ...°C/...°F temperatūroje. Laikyti vėsioje vietoje.
	HU	A tárolási hőmérséklet legfeljebb ...°C/...°F lehet. Hűvös helyen tartandó.
	MT	A••en f' temperaturi li ma je••edux ...°C/...°F. •omm frisk.
	NL	Bij maximaal ...°C/...°F bewaren. Koel bewaren.
	PL	Przechowywać w temperaturze nieprzekraczającej ...°C/...°F. Przechowywać w chłodnym miejscu.
	PT	Armazenar a uma temperatura não superior a ...°C/...°F. Conservar em ambiente fresco.
	RO	A se depozita la temperaturi care s• nu dep•easc• ...°C/...°F. A se p•stra la rece.
	SK	Uchovávať pri teplotách do ...°C/...°F. Uchovávať v chlade.
	SL	Hraniti pri temperaturi do ...°C/...°F. Hraniti na hladnem.
	FI	Varastoi alle ...°C/...°F lämpötilassa. Säilytä viileässä.
	SV	Förvaras vid högst ...°C/...°F. Förvaras svalt.

Table 1.5
Precautionary statements – Disposal

P501	Language	
	BG	• ...
	ES	Eliminar el contenido/el recipiente en ...
	CS	Odstraňte obsah/obal ...
	DA	Indholdet/holderen bortskaffes i ...
	DE	Inhalt/Behälter ... zuführen.
	ET	Sisu/mahuti kõrvaldada ...
	EL	
	EN	Dispose of contents/container to ...
	FR	Éliminer le contenu/récipient dans ...
	GA	Diúscair an t-ábhar/an coimeádán i ...
	IT	Smaltire il prodotto/recipiente in ...
	LV	Atbrīvoties no satura / tvertnes...
	LT	Turin/talpyklį išpilti (išmesti) ...
	HU	A tartalom/edény elhelyezése hulladékként: ...
	MT	Armi l-kontenut/il-kontenitur fi ...
	NL	Inhoud/verpakking afvoeren naar ...
	PL	Zawartość/pojemnik usuwać do ...
	PT	Eliminar o conteúdo/recipiente em ...
	RO	Aruncați conținutul/recipientul la ...
	SK	Zneškodnite obsah/nádobu ...
	SL	Odstraniti vsebino/posodo ...
	FI	Hävitä sisältö/pakkaus ...
	SV	Innehållet/behållaren lämnas till...

P502	Language	
	BG	
	ES	Pedir información al fabricante o proveedor sobre su recuperación o reciclado
	CS	Informujte se u výrobce nebo dodavatele o regeneraci nebo recyklaci

P502	Language	
	DA	Indhent oplysninger om genvinding/genanvendelse hos
	DE	Informationen zur Wiederverwendung/Wiederverwertung beim
	ET	Hankida valmistajalt/tarnijalt teavet kemikaali taaskasutamise/ringlussevõtu
	EL	
	EN	Refer to manufacturer/supplier for information on recovery/recycling
	FR	Se reporter au fabricant/fournisseur pour des informations concernant la récupération/le recyclage
	GA	Féach an fhaisnéis ón monaróir/soláthróir maidir le haisghabháil/athchúrsáil
	IT	Chiedere informazioni al produttore o fornitore per il recupero/riciclaggio
	LV	Informācija par rekuperāciju/ pārstrādi saņemama pie ražotāja/piegādātāja
	LT	Kreiptis gamintojų (tiekėjus) informacijai apie šių medžiagų ar preparatų
	HU	A gyártó/szállító határozza meg a hasznosításra és újrafeldolgozásra
	MT	Irreferi għall-manifattur/fornitur rigward informazzjoni dwar l-
	NL	Raadpleeg fabrikant/leverancier voor informatie over terugwinning/recycling
	PL	Przestrzega wskazówek producenta lub dostawcy dotyczących odzysku lub
	PT	Solicitar ao fabricante/fornecedor informações relativas à
	RO	Adresa-i-vă producătorului pentru informații privind recuperarea/reciclarea
	SK	Informujte sa u výrobcu alebo dodávateľa o regenerácii alebo recyklácii
	SL	Za podatke glede obnovitve/reciklaže se obrnite na proizvajalca/dobavitelja
	FI	Hanki valmistajalta/toimittajalta tietoja uudelleenkäytöstä/kierrätyksestä
	SV	Rådfråga tillverkare/leverantör om återvinning/återanvändning

ANNEX V


Hazard Pictograms

INTRODUCTION


The hazard pictograms for each hazard class, differentiation of a hazard class and hazard category shall satisfy the provisions of this Annex and Annex I, section 1.2 and conform, in terms of symbols and general format, to the specimens shown.

1. PART 1: PHYSICAL HAZARDS


1.1. SYMBOL: EXPLODING BOMB

Pictogram (1)	Hazard class and hazard category (2)
GHS01 	<u>Section 2.1</u> Unstable explosives Explosives of Divisions 1.1, 1.2, 1.3, 1.4 <u>Section 2.8</u> Self reactive substances and mixtures, Types A, B <u>Section 2.15</u> Organic peroxides, Types A, B


1.2. SYMBOL: FLAME

Pictogram (1)	Hazard class and hazard category (2)
<p>GHS02</p> 	<p><u>Section 2.2</u> Flammable gases, hazard category 1</p> <p><u>Section 2.3</u> Flammable aerosols, hazard categories 1, 2</p> <p><u>Section 2.6</u> Flammable liquids, hazard categories 1, 2, 3</p> <p><u>Section 2.7</u> Flammable solids, hazard categories 1, 2</p> <p><u>Section 2.8</u> Self-reactive substances and mixtures, Types B, C, D, E, F</p> <p><u>Section 2.9</u> Pyrophoric liquids, hazard category 1</p> <p><u>Section 2.10</u> Pyrophoric solids, hazard category 1</p> <p><u>Section 2.11</u> Self-heating substances and mixtures, hazard categories 1, 2</p> <p><u>Section 2.12</u> Substances and mixtures, which in contact with water, emit flammable gases, hazard categories 1, 2, 3</p> <p><u>Section 2.15</u> Organic peroxides, Types B, C, D, E, F</p>


1.3. SYMBOL: FLAME OVER CIRCLE

Pictogram (1)	Hazard class and hazard category (2)
<p>GHS03</p> 	<p><u>Section 2.4</u> Oxidising gases, hazard category 1</p> <p><u>Section 2.13</u> Oxidising liquids, hazard categories 1, 2, 3</p> <p><u>Section 2.14</u> Oxidising solids, hazard categories 1, 2, 3</p>

1.4. SYMBOL: GAS CYLINDER

Pictogram (1)	Hazard class and hazard category (2)
<p>GHS04</p> 	<p><u>Section 2.5</u> Gases under pressure:</p> <ul style="list-style-type: none">Compressed gases;Liquefied gases;Refrigerated liquefied gases;Dissolved gases

1.5. SYMBOL: CORROSION

Pictogram (1)	Hazard class and hazard category (2)
<p data-bbox="261 423 357 454">GHS05</p> 	<p data-bbox="480 423 639 454"><u>Section 2.16</u></p> <p data-bbox="480 495 975 526">Corrosive to metals, hazard category 1</p>

1.6. A PICTOGRAM IS NOT REQUIRED FOR THE FOLLOWING PHYSICAL HAZARD CLASSES AND HAZARD CATEGORIES:

Section 2.1: Explosives of Division 1.5

Section 2.1: Explosives of Division 1.6


Section 2.2: Flammable gases, hazard Category 2

Section 2.8: Self-reactive substances and mixtures, Type G


Section 2.15: Organic peroxides, Type G

2. PART 2: HEALTH HAZARDS


2.1. SYMBOL: SKULL AND CROSSBONES

Pictogram (1)	Hazard class and hazard category (2)
<p data-bbox="261 1720 357 1751">GHS06</p> 	<p data-bbox="480 1720 624 1751"><u>Section 3.1</u></p> <p data-bbox="480 1787 1321 1818">Acute toxicity (oral, dermal, inhalation), hazard categories 1, 2, 3</p>


2.2. SYMBOL: CORROSION

Pictogram (1)	Hazard class and hazard category (2)
GHS05 	<u>Section 3.2</u> Skin corrosion, hazard categories 1A, 1B, 1C <u>Section 3.3</u> Serious eye damage, hazard category 1

2.3. SYMBOL: EXCLAMATION MARK

Pictogram (1)	Hazard class and hazard category (2)
GHS07 	<u>Section 3.1</u> Acute toxicity (oral, dermal, inhalation), hazard category 4 <u>Section 3.2</u> Skin irritation, hazard category 2 <u>Section 3.3</u> Eye irritation, hazard category 2 <u>Section 3.4</u> Skin sensitisation, hazard categories 1, 1A, 1B <u>Section 3.8</u> Specific Target Organ Toxicity – Single exposure, hazard category 3 Respiratory tract irritation Narcotic effects

2.4. SYMBOL: HEALTH HAZARD


Pictogram (1)	Hazard class and hazard category (2)
<p>GHS08</p> 	<p><u>Section 3.4</u> Respiratory sensitisation, hazard categories 1, 1A, 1B</p> <p><u>Section 3.5</u> Germ cell mutagenicity, hazard categories 1A, 1B, 2</p> <p><u>Section 3.6</u> Carcinogenicity, hazard categories 1A, 1B, 2</p> <p><u>Section 3.7</u> Reproductive toxicity, hazard categories 1A, 1B, 2</p> <p><u>Section 3.8</u> Specific Target Organ Toxicity – Single exposure, hazard categories 1, 2</p> <p><u>Section 3.9</u> Specific Target Organ Toxicity – Repeated exposure, hazard categories 1, 2</p> <p><u>Section 3.10</u> Aspiration hazard, hazard category 1</p>

2.5. A PICTOGRAM IS NOT REQUIRED FOR THE FOLLOWING HEALTH HAZARD CATEGORIES:

Section 3.7: Reproductive toxicity, Effects on or via lactation, additional hazard category

3. PART 3: ENVIRONMENTAL HAZARDS

3.1. SYMBOL: ENVIRONMENT


Pictogram (1)	Hazard class and hazard category (2)
<p data-bbox="261 495 360 524">GHS09</p> 	<p data-bbox="480 495 624 524"><u>Section 4.1</u></p> <p data-bbox="480 562 970 591">Hazardous to the aquatic environment</p> <ul data-bbox="480 629 815 734" style="list-style-type: none"><li data-bbox="480 629 815 658">– Acute hazard category 1<li data-bbox="480 696 900 734">– Chronic hazard categories 1, 2

A pictogram is not required for the following environmental hazard classes and hazard categories:

Section 4.1: Hazardous to the aquatic environment – Chronic hazard categories 3, 4

4. PART 4: ADDITIONAL HAZARDS

4.1. SYMBOL: EXCLAMATION MARK

Pictogram (1)	Hazard class and hazard category (2)
<p data-bbox="261 1507 360 1536">GHS07</p> 	<p data-bbox="480 1507 624 1536"><u>Section 5.1</u></p> <p data-bbox="480 1597 1102 1626">Hazardous to the ozone layer, hazard category 1</p>

ANNEX VI

Harmonised classification and labelling for certain hazardous substances

Part 1 of this Annex provides an introduction to the list of harmonised classification and labelling, including information listed for each entry and related classifications and hazard statements in Table 3.1, subject to certain considerations arising from translating the classifications listed in Annex I to Directive 67/548/EEC.

Part 2 of this Annex lays down general principles for preparing dossiers to propose and justify harmonised classification and labelling of substances at Community level.

Part 3 of this Annex lists hazardous substances for which harmonised classification and labelling have been established at Community level. In Table 3.1 the classification and labelling are based on the criteria in Annex I to this Regulation. In Table 3.2 classification and labelling are based on the criteria in Annex VI to Directive 67/548/EEC.

1. PART 1: INTRODUCTION TO THE LIST OF HARMONISED CLASSIFICATIONS AND LABELLING

1.1. INFORMATION LISTED FOR EACH ENTRY

1.1.1. Numbering of entries and identification of a substance

1.1.1.1. *Index numbers*

Entries in Part 3 are listed according to the atomic number of the element most characteristic of the properties of the substance. Organic substances, because of their variety, have been placed in classes. The Index number for each substance is in the form of a digit sequence of the type ABC-RST-VW-Y. ABC corresponds to the atomic number of the most characteristic element or the most characteristic organic group in the molecule. RST is the consecutive number of the substance in the series ABC. VW denotes the form in which the substance is produced or placed on the market. Y is the check-digit calculated in accordance with the 10-digit ISBN method. This number is indicated in the column entitled "Index No".

1.1.1.2. EC numbers

The EC number, i.e. EINECS, ELINCS or NLP, is the official number of the substance within the European Union. The EINECS number can be obtained from the European Inventory of Existing Commercial Chemical Substance (EINECS)¹. The ELINCS number can be obtained from the European List of Notified Substances (as amended) (EUR 22543 EN, Office for Official Publications of the European Communities, 2006, ISSN 1018-5593). The NLP number can be obtained from the list of "No-longer-polymers" (as amended) (Document, Office for Official Publications of the European Communities, 1997, ISBN 92-827-8995-0). The EC number is a seven-digit system of the type XXX-XXX-X which starts at 200-001-8 (EINECS), at 400-010-9 (ELINCS) and at 500-001-0 (NLP). This number is indicated in the column entitled "EC No".

1.1.1.3. CAS number

The Chemical Abstracts Service (CAS) number is also included to assist identification of the entry. It should be noted that the EINECS number includes both anhydrous and hydrated forms of a substance, and there are frequently different CAS numbers for anhydrous and hydrated forms. The CAS number included is for the anhydrous form only, and therefore the CAS number shown does not always describe the entry as accurately as the EINECS number. This number is indicated in the column entitled "CAS No".

1.1.1.4. International Chemical Identification

Wherever possible, hazardous substances are designated by their IUPAC names. Substances listed in EINECS, ELINCS or the list of "No-longer-polymers" are designated using the names in these lists. Other names, such as usual or common names, are included in some cases. Whenever possible, plant protection products and biocides are designated by their ISO names.

Impurities, additives and minor components are normally not mentioned unless they contribute significantly to the classification of the substance.

¹ OJ C 146A, 15.6.1990.

Some substances are described with a specific percentage of purity. Substances containing a higher content of active material (e.g. organic peroxide) than this percentage are not included in the entry in Part 3 and may have other hazardous properties (e.g. explosive) and should be classified and labelled accordingly.

Where specific concentration limits are shown, these apply to the substance or substances shown in the entry. In particular, in the case of entries which are mixtures of substances or substances described with a specific percentage of purity, the limits apply to the substance as described in Part 3 and not the pure substance.

Without prejudice to Article 17(2), for substances appearing in Part 3, the name of the substance to be used on the label shall be one of the designations given there. For certain substances, additional information has been added in square brackets in order to help identify the substance. This additional information need not be included on the label.

Certain entries contain a reference to impurities; in these cases the name of the substance is followed by the text: "(containing \geq xx % impurity)". The reference in brackets is then to be considered as a part of the name, and must be included on the label.

1.1.1.5. *Entries for groups of substances*

A number of group entries are included in Part 3. In these cases, the classification and labelling requirements will apply to all substances covered by the description.

In some cases, there are classification and labelling requirements for specific substances that would be covered by the group entry. In such cases a specific entry is included in Part 3 for the substance and the group entry will be annotated with the phrase "except those specified elsewhere in this Annex".

In some cases, individual substances may be covered by more than one group entry. In these cases, the classification of the substance reflects the classification for each of the two group entries. In cases where different classifications for the same hazard are given, the most severe classification shall be applied.

Entries in Part 3 for salts (under any denomination) cover both anhydrous and hydrous forms, unless specified otherwise.

EC or CAS numbers are not usually included for entries which comprise more than four individual substances.

1.1.2. Information related to the classification and labelling of each entry in Table 3.1

1.1.2.1. Classification codes

1.1.2.1.1. Hazard class and category codes

The classification for each entry is based on the criteria set out in Annex I, in accordance with Article 13 (a) and is presented in the form of a code representing the hazard class and the category or categories/divisions/types within this hazard class.

The Hazard class and category codes used for each of the hazard categories/divisions/types included in a class are shown in Table 1.1.

Table 1.1

Hazard Class	Hazard Class and Category Code
Explosive	Unst. Expl. Expl. 1.1 Expl. 1.2 Expl. 1.3 Expl. 1.4 Expl. 1.5 Expl. 1.6
Flammable gas	Flam. Gas 1 Flam. Gas 2
Flammable aerosol	Flam. Aerosol 1 Flam. Aerosol 2
Oxidising gas	Ox. Gas 1
Gases under pressure	Press. Gas*
Flammable liquid	Flam. Liq. 1 Flam. Liq. 2 Flam. Liq. 3
Flammable solid	Flam. Sol. 1 Flam. Sol. 2
Self-reactive substance or mixture	Self-react. A Self-react. B Self-react. CD Self-react. EF Self-react. G
Pyrophoric liquid	Pyr. Liq. 1

Pyrophoric solid	Pyr. Sol. 1
Self-heating substance or mixture	Self-heat. 1 Self-heat. 2
Substance or mixture which in contact with water emits flammable gas	Water-react. 1 Water-react. 2 Water-react. 3
Oxidising liquid	Ox. Liq. 1 Ox. Liq. 2 Ox. Liq. 3
Oxidising solid	Ox. Sol. 1 Ox. Sol. 2 Ox. Sol. 3
Organic peroxide	Org. Perox. A Org. Perox. B Org. Perox. CD Org. Perox. EF Org. Perox. G
Substance or mixture corrosive to metals	Met. Corr. 1
Acute toxicity	Acute Tox. 1 Acute Tox. 2 Acute Tox. 3 Acute Tox. 4
Skin corrosion/irritation	Skin Corr. 1A Skin Corr. 1B Skin Corr. 1C Skin Irrit. 2
Serious eye damage/eye irritation	Eye Dam. 1 Eye Irrit. 2
Respiratory/skin sensitization	Resp. Sens. 1, 1A, 1B Skin Sens. 1, 1A, 1B
Germ cell mutagenicity	Muta. 1A Muta. 1B Muta. 2
Carcinogenicity	Carc. 1A Carc. 1B Carc. 2
Reproductive toxicity	Repr. 1A Repr. 1B Repr. 2 Lact.
Specific target organ toxicity – single exposure	STOT SE 1 STOT SE 2 STOT SE 3
Specific target organ toxicity – repeated exposure	STOT RE 1 STOT RE 2
Aspiration hazard	Asp. Tox. 1
Hazardous to the aquatic environment	Aquatic Acute 1 Aquatic Chronic 1 Aquatic Chronic 2

	Aquatic Chronic 3 Aquatic Chronic 4
Hazardous for the ozone layer	Ozone 1

* see Note U in 1.1.3.

1.1.2.1.2. *Hazard statement codes*

The hazard statements assigned in accordance with Article 13 (b), are indicated in accordance with Annex III. In addition, for certain hazard statements letters are added to the 3-digit code. The following additional codes are used:

H350i	May cause cancer by inhalation.
H360F	May damage fertility.
H360D	May damage the unborn child.
H361f	Suspected of damaging fertility.
H361d	Suspected of damaging the unborn child.
H360FD	May damage fertility. May damage the unborn child.
H361fd	Suspected of damaging fertility. Suspected of damaging the unborn child.
H360Fd	May damage fertility. Suspected of damaging the unborn child.
H360Df	May damage the unborn child. Suspected of damaging fertility.

1.1.2.2. *Labelling codes*

In the labelling column, the following elements are listed:

- (i) the hazard pictogram codes as specified in Annex V, in accordance with the precedence rules in Article 26;
- (ii) the signal word code 'Dgr' for 'Danger' or 'Wng' for 'Warning', in accordance with the precedence rule in Article 20(3);

- (iii) the hazard statement codes as specified in Annex III, in accordance with the classification;
- (iv) the codes for the supplemental statements assigned in accordance with Article 25 (1) and the rules specified in Annex II, part 1.

1.1.2.3. *Specific concentration limits and M-factors*

Specific concentration limits, where different from the generic concentration limits given in Annex I for a certain category, are given in a separate column together with the classification concerned using the same codes as under 1.1.2.1.1. Where no specific concentration limits are given in this Annex for a certain category, the generic concentration limits given in Annex I must be applied for the classification of substances containing impurities, additives or individual constituents or for mixtures. An asterisk (*) in this column indicates that the entry has specific concentration limits for acute toxicity under Directive 67/548/EEC (Table 3.2): see also section 1.2.1.

Unless otherwise shown, the concentration limits are a percentage by weight of the substance calculated with reference to the total weight of the mixture.

In case an M-factor has been harmonised for substances classified as hazardous to the aquatic environment in the categories Aquatic Acute 1 or Aquatic Chronic 1, this M-factor is given in Table 3.1 in the same column as the specific concentration limits. In case an M-factor for Aquatic Acute 1 and an M-factor for Aquatic Chronic 1 have been harmonised, each M-factor shall be listed in the same line as its corresponding differentiation. Where a single M-factor is given in Table 3.1 and the substance is classified as Aquatic Acute 1 and Aquatic Chronic 1, this M-factor shall be used by the manufacturer, importer or downstream user for the classification of a mixture containing this substance for acute and long-term aquatic hazards using the summation method. Where no M-factor is given in Table 3.1, M-factor(s) based on available data for the substance shall be set by the manufacturer, importer or downstream user. For the setting and use of M-factors, see section 4.1.3.5.5.5 of Annex I.

1.1.3. Notes assigned to an entry

The note(s) assigned to an entry are listed in the column entitled "Notes". The meaning of the notes is as follows:

1.1.3.1. Notes relating to the identification, classification and labelling of substances

Note A:

Without prejudice to Article 17(2), the name of the substance must appear on the label in the form of one of the designations given in Part 3.

In Part 3, use is sometimes made of a general description such as "... compounds" or "... salts". In this case, the supplier is required to state on the label the correct name, due account being taken of section 1.1.1.4.

Note B:

Some substances (acids, bases, etc.) are placed on the market in aqueous solutions at various concentrations and, therefore, these solutions require different classification and labelling since the hazards vary at different concentrations.

In Part 3 entries with Note B have a general designation of the following type: "nitric acid ...%".

In this case the supplier must state the percentage concentration of the solution on the label. Unless otherwise stated, it is assumed that the percentage concentration is calculated on a weight/weight basis.

Note C:

Some organic substances may be marketed either in a specific isomeric form or as a mixture of several isomers.

In this case the supplier must state on the label whether the substance is a specific isomer or a mixture of isomers.

Note D:

Certain substances which are susceptible to spontaneous polymerisation or decomposition are generally placed on the market in a stabilised form. It is in this form that they are listed in Part 3.

However, such substances are sometimes placed on the market in a non-stabilised form. In this case, the supplier must state on the label the name of the substance followed by the words "non-stabilised".

Note E (Table 3.2):

Substances with specific effects on human health (see Chapter 4 of Annex VI to Directive 67/548/EEC) that are classified as carcinogenic, mutagenic and/or toxic for reproduction in categories 1 or 2 are ascribed Note E if they are also classified as very toxic (T+), toxic (T) or harmful (Xn). For these substances, the risk phrases R20, R21, R22, R23, R24, R25, R26, R27, R28, R39, R68 (harmful), R48 and R65 and all combinations of these risk phrases shall be preceded by the word "Also".

Note F:

This substance may contain a stabiliser. If the stabiliser changes the hazardous properties of the substance, as indicated by the classification in Part 3, classification and labelling should be provided in accordance with the rules for classification and labelling of hazardous mixtures.

Note G:

This substance may be marketed in an explosive form in which case it must be evaluated using the appropriate test methods. The classification and labelling provided shall reflect the explosive properties.

Note J:

The classification as a carcinogen or mutagen need not apply if it can be shown that the substance contains less than 0,1 % w/w benzene (EINECS No 200-753-7). This note applies only to certain complex coal- and oil-derived substances in Part 3.

Note K:

The classification as a carcinogen or mutagen need not apply if it can be shown that the substance contains less than 0,1 % w/w 1,3-butadiene (EINECS No 203-450-8). If the substance is not classified as a carcinogen or mutagen, at least the precautionary statements

(P102-)P210-P403 (Table 3.1) or the S-phrases (2-)9-16 (Table 3.2) should apply. This note applies only to certain complex oil-derived substances in Part 3.

Note L:

The classification as a carcinogen need not apply if it can be shown that the substance contains less than 3 % DMSO extract as measured by IP 346 "Determination of polycyclic aromatics in unused lubricating base oils and asphaltene free petroleum fractions – Dimethyl sulphoxide extraction refractive index method", Institute of Petroleum, London. This note applies only to certain complex oil-derived substances in Part 3.

Note M:

The classification as a carcinogen need not apply if it can be shown that the substance contains less than 0,005 % w/w benzo[a]-pyrene (EINECS No 200-028-5). This note applies only to certain complex coal-derived substances in Part 3.

Note N:

The classification as a carcinogen need not apply if the full refining history is known and it can be shown that the substance from which it is produced is not a carcinogen. This note applies only to certain complex oil-derived substances in Part 3.

Note P:

The classification as a carcinogen or mutagen need not apply if it can be shown that the substance contains less than 0,1 % w/w benzene (EINECS No 200-753-7).

When the substance is not classified as a carcinogen at least the precautionary statements (P102-)P260-P262-P301 + P310-P331 (Table 3.1) or the S-phrases (2-)23-24-62 (Table 3.2) shall apply.

This note applies only to certain complex oil-derived substances in Part 3.

Note Q:

The classification as a carcinogen need not apply if it can be shown that the substance fulfils one of the following conditions:

- a short term biopersistence test by inhalation has shown that the fibres longer than 20 µm have a weighted half-life less than 10 days; or
- a short term biopersistence test by intratracheal instillation has shown that the fibres longer than 20 µm have a weighted half-life less than 40 days; or
- an appropriate intra-peritoneal test has shown no evidence of excess carcinogenicity; or
- absence of relevant pathogenicity or neoplastic changes in a suitable long term inhalation test.

Note R:

The classification as a carcinogen need not apply to fibres with a length weighted geometric mean diameter less two standard geometric errors greater than 6 µm.

Note S:

This substance may not require a label according to Article 17 (see section 1.3 of Annex I) (Table 3.1).

This substance may not require a label according to Article 23 of Directive 67/548/EEC (see section 8 of Annex VI to that Directive) (Table 3.2).

Note T:

This substance may be marketed in a form which does not have the physical hazards as indicated by the classification in the entry in Part 3. If the results of the relevant method or methods in accordance with Part 2 of Annex I of this Regulation show that the specific form of substance marketed does not exhibit this physical property or these physical hazards, the substance shall be classified in accordance with the result or results of this test or these tests. Relevant information, including reference to the relevant test method(s) shall be included in the safety data sheet.

Note U (Table 3.1):

When put on the market gases have to be classified as "Gases under pressure", in one of the groups compressed gas, liquefied gas, refrigerated liquefied gas or dissolved gas. The

group depends on the physical state in which the gas is packaged and therefore has to be assigned case by case.

1.1.3.2. *Notes relating to the classification and labelling of mixtures*

Note 1:

The concentration stated or, in the absence of such concentrations, the generic concentrations of this Regulation (Table 3.1) or the generic concentrations of Directive 1999/45/EC (Table 3.2), are the percentages by weight of the metallic element calculated with reference to the total weight of the mixture.

Note 2:

The concentration of isocyanate stated is the percentage by weight of the free monomer calculated with reference to the total weight of the mixture.

Note 3:

The concentration stated is the percentage by weight of chromate ions dissolved in water calculated with reference to the total weight of the mixture.

Note 5:

The concentration limits for gaseous mixtures are expressed as volume per volume percentage.

Note 7:

Alloys containing nickel are classified for skin sensitisation when the release rate of 0,5 µg Ni/cm²/week, as measured by the European Standard reference test method EN 1811, is exceeded.

1.1.4. Information related to the classification and labelling of each entry in Table 3.2

1.1.4.1. *Classification codes*

The classification for each category of danger (as defined in Article 2(2) of Directive 67/548/EEC) is normally presented in the form of an abbreviation representing the category of danger together with the appropriate risk phrase or phrases. However, in

some cases (i.e. substances classified as flammable, sensitising and some substances classified as dangerous for the environment) the risk phrase alone is used;

The abbreviation for each of the categories of danger is shown below:

- explosive: E
- oxidising: O
- extremely flammable: F+
- highly flammable: F
- flammable: R10
- very toxic: T+
- Toxic: T
- harmful: Xn
- corrosive: C
- irritant: Xi
- sensitising: R42 and/or R43
- carcinogenic: Carc. Cat. (1, 2 or 3)
- mutagenic: Muta. Cat. (1, 2 or 3)
- toxic for reproduction: Repr. Cat. (1, 2 or 3)
- dangerous for the environment: N or R52 and/or R53;

1.1.4.2. Labelling codes

- (i) the letter assigned to the substance in accordance with Annex II to Directive 67/548/EEC (see Article 23(2)(c) Directive 67/548/EEC). This acts as an abbreviation for the symbol and for the indication of danger (if these are assigned);

- (ii) the risk phrases, denoted as a series of numbers preceded by the letter R indicating the nature of the special risks, in accordance with Annex III to Directive 67/548/EEC (see Article 23(2)(d) Directive 67/548/EEC). The numbers are separated by either a dash (-) to denote separate statements concerning special risks (R), or an oblique stroke (/) to denote a combined statement, in a single sentence, of the special risks as set out in Annex III to Directive 67/548/EEC;
- (iii) the safety phrases denoted as a series of numbers preceded by the letter S indicating the recommended safety precautions, in accordance with Annex IV to Directive 67/548/EEC (see Article 23(2)(e) Directive 67/548/EEC). Again the numbers are separated by either a dash or an oblique stroke; the significance of recommended safety precautions is set out in Annex IV to Directive 67/548/EEC. The safety phrases shown apply only to substances; for mixtures, phrases are selected according to the usual rules.

Note that for certain dangerous substances and mixtures sold to the general public certain S-phrases are mandatory.

S1, S2 and S45 are obligatory for all very toxic, toxic and corrosive substances and mixtures sold to the general public.

S2 and S46 are obligatory for all other dangerous substances and mixtures sold to the general public other than those that have only been classified as dangerous for the environment.

Safety phrases S1 and S2 are shown in brackets in Annex I and can only be omitted from the label when the substance or mixture is sold for industrial use only.

1.1.4.3. *Specific Concentration Limits*

The concentration limits and associated classifications are necessary to classify dangerous mixtures containing the substance in accordance with Directive 1999/45/EC.

Unless otherwise shown, the concentration limits are a percentage by weight of the substance calculated with reference to the total weight of the mixture.

Where no concentration limits are given, the concentration limits to be used when applying the conventional method of assessing health hazards are those in Annex II, and when applying the conventional method of assessing environmental hazards are those in Annex III to Directive 1999/45/EC.

1.2. CLASSIFICATIONS AND HAZARD STATEMENTS IN TABLE 3.1 ARISING FROM TRANSLATION OF CLASSIFICATIONS LISTED IN ANNEX I TO DIRECTIVE 67/548/EEC

1.2.1. Minimum classification

For certain hazard classes, including acute toxicity and STOT repeated exposure, the classification according to the criteria in Directive 67/548/EEC does not correspond directly to the classification in a hazard class and category under this Regulation. In these cases the classification in this Annex shall be considered as a minimum classification. This classification shall be applied if none of the following conditions are fulfilled:

- the manufacturer or importer has access to data or other information as specified in Part 1 of Annex I that lead to classification in a more severe category compared to the minimum classification. Classification in the more severe category must then be applied;
- the minimum classification can be further refined based on the translation table in Annex VII when the physical state of the substance used in the acute inhalation toxicity test is known to the manufacturer or importer. The classification as obtained from Annex VII shall then substitute the minimum classification indicated in this Annex if it differs from it.

Minimum classification for a category is indicated by the reference * in the column "Classification" in Table 3.1.

The reference * can also be found in the column 'Specific concentration Limits and M-factors' where it indicates that the entry concerned has specific concentration limits under Directive 67/548/EEC (Table 3.2) for acute toxicity. These concentration limits cannot be "translated" into concentration limits under this Regulation, especially when a minimum

classification is given. However, when the reference * is shown, the classification for acute toxicity for this entry may be of special concern.

1.2.2. Route of exposure cannot be excluded

For certain hazard classes, e.g. STOT, the route of exposure should be indicated in the hazard statement only if it is conclusively proven that no other route of exposure can cause the hazard in accordance to the criteria in Annex I. Under Directive 67/548/EEC the route of exposure is indicated for classifications with R48 when there was data justifying the classification for this route of exposure. The classification under 67/548/EEC indicating the route of exposure has been translated into the corresponding class and category according to this Regulation, but with a general hazard statement not specifying the route of exposure as the necessary information is not available.

These hazard statements are indicated by the reference ** in Table 3.1.

1.2.3. Hazard statements for reproductive toxicity

Hazard statements H360 and H361 indicate a general concern for effects on both fertility and development: "May damage/Suspected of damaging fertility or the unborn child". According to the criteria, the general hazard statement can be replaced by the hazard statement indicating only the property of concern, where either fertility or developmental effects are proven to be not relevant.

In order not to lose information from the harmonised classifications for fertility and developmental effects under Directive 67/548/EEC, the classifications have been translated only for those effects classified under that Directive.

These hazard statements are indicated by the reference *** in Table 3.1.

1.2.4. Correct classification for physical hazards could not be established

For some entries the correct classification for physical hazards could not be established because sufficient data are not available for the application of the classification criteria in this Regulation. The entry might be assigned to a different (also higher) category or even another hazard class than indicated. The correct classification shall be confirmed by testing.

The entries with physical hazards that need to be confirmed by testing are indicated by the reference **** in Table 3.1.

2. PART 2: DOSSIERS FOR HARMONISED CLASSIFICATION AND LABELLING

This Part lays down general principles for preparing dossiers to propose and justify harmonised classification and labelling.

The relevant parts of sections 1, 2 and 3 of Annex I to Regulation (EC) No 1907/2006 shall be used for the methodology and format of any dossier.

For all dossiers any relevant information from registration dossiers shall be considered and other available information may be used. For hazard information which has not been previously submitted to the Agency, a robust study summary shall be included in the dossier.

A dossier for harmonised classification and labelling shall contain the following:

- Proposal

The proposal shall include the identity of the substance or substances concerned and the harmonised classification and labelling proposed.

- Justification for the proposed harmonised classification and labelling

A comparison of the available information with the criteria contained in Parts 2 to 5, taking into account the general principles in Part 1, of Annex I to this Regulation shall be completed and documented in the format set out in Part B of the Chemical Safety Report in Annex I to Regulation (EC) No 1907/2006.

- Justification for other effects at Community level

For other effects than carcinogenicity, mutagenicity, reprotoxicity and respiratory sensitisation a justification shall be provided that there is a need for action demonstrated at Community level. This does not apply for an active substance in the meaning of Directive 91/414/EEC or Directive 98/8/EC.

3. PART 3: HARMONISED CLASSIFICATION AND LABELLING TABLES

Table 3.1: List of harmonised classification and labelling of hazardous substances.

Table 3.2: The list of harmonised classification and labelling of hazardous substances from Annex I to Directive 67/548/EEC.

ANNEX VII

Translation table from classification under Directive 67/548/EEC to classification under this Regulation

This Annex includes a table to assist translation of a classification made for a substance or a mixture under Directive 67/548/EEC or Directive 1999/45/EC, respectively, into the corresponding classification under this Regulation. Whenever data for the substance or mixture are available, an evaluation and classification shall be done in accordance with Articles 9 to 13 of this Regulation.

1. TRANSLATION TABLE

The codes used are introduced in Table 1.1 and section 1.1.2.2 of Annex VI.

Table 1.1
Translation between classification in accordance with
Directive 67/548/EEC and this Regulation

Classification under Directive 67/548/EEC	Physical state of the substance when relevant	Classification under this Regulation		Note
		Hazard Class-and-Category	Hazard statement	
E; R2		No direct translation possible.		
E; R3		No direct translation possible.		
O; R7		Org. Perox. CD	H242	
		Org. Perox. EF	H242	
O; R8	gas	Ox. Gas 1	H270	
O; R8	liquid, solid	No direct translation possible.		
O; R9	liquid	Ox. Liq. 1	H271	
O; R9	solid	Ox. Sol. 1	H271	
R10	liquid	No direct translation possible.		

		<p>Correct translation of R10, liquid is:</p> <ul style="list-style-type: none"> - Flam. Liq. 1, H224 if flashpoint < 23 °C and initial boiling point • 35°C - Flam. Liq. 2, H225 if flashpoint < 23°C and initial boiling point > 35 °C - Flam. Liq. 3, H226 if flashpoint • 23°C 		
F; R11	liquid	<p>No direct translation possible.</p> <p>Correct translation of F; R11, liquid is:</p> <ul style="list-style-type: none"> - Flam. Liq. 1, H224 if initial boiling point • 35°C - Flam. Liq. 2, H225 if initial boiling point > 35°C 		
F; R11	solid	No direct translation possible.		
F+; R12	gas	<p>No direct translation possible.</p> <p>Correct translation of F+; R12, gaseous results either in Flam. Gas 1, H220 or Flam. Gas 2, H221.</p>		
F+; R12	liquid	Flam. Liq. 1	H224	
F+; R12	liquid	Self-react. CD	H242	
		Self-react. EF	H242	
		Self-react. G	none	
F; R15		No translation possible.		
F; R17	liquid	Pyr. Liq. 1	H250	
F; R17	solid	Pyr. Sol. 1	H250	
Xn; R20	gas	Acute Tox. 4	H332	(1)
Xn; R20	vapours	Acute Tox. 4	H332	(1)
Xn; R20	dust/mist	Acute Tox. 4	H332	
Xn; R21		Acute Tox. 4	H312	(1)
Xn; R22		Acute Tox. 4	H302	(1)
T; R23	gas	Acute Tox. 3	H331	(1)

T; R23	vapour	Acute Tox. 2	H330	
T; R23	dust/mist	Acute Tox. 3	H331	(1)
T; R24		Acute Tox. 3	H311	(1)
T; R25		Acute Tox. 3	H301	(1)
T+; R26	gas	Acute Tox. 2	H330	(1)
T+; R26	vapour	Acute Tox. 1	H330	
T+; R26	dust/mist	Acute Tox. 2	H330	(1)
T+; R27		Acute Tox. 1	H310	
T+; R28		Acute Tox. 2	H300	(1)
R33		STOT RE 2	H373	(3)
C; R34		Skin Corr. 1B	H314	(2)
C; R35		Skin Corr. 1A	H314	
Xi; R36		Eye Irrit. 2	H319	
Xi; R37		STOT SE 3	H335	
Xi; R38		Skin Irrit. 2	H315	
T; R39/23		STOT SE 1	H370	(3)
T; R39/24		STOT SE 1	H370	(3)
T; R39/25		STOT SE 1	H370	(3)
T+; R39/26		STOT SE 1	H370	(3)
T+; R39/27		STOT SE 1	H370	(3)
T+; R39/28		STOT SE 1	H370	(3)
Xi; R41		Eye Dam. 1	H318	
R42		Resp. Sens. 1	H334	
R43		Skin Sens. 1	H317	
Xn; R48/20		STOT RE 2	H373	(3)
Xn; R48/21		STOT RE 2	H373	(3)

Xn; R48/22		STOT RE 2	H373	(3)
T; R48/23		STOT RE 1	H372	(3)
T; R48/24		STOT RE 1	H372	(3)
T; R48/25		STOT RE 1	H372	(3)
R64		Lact.	H362	
Xn; R65		Asp. Tox. 1	H304	
R67		STOT SE 3	H336	
Xn; R68/20		STOT SE 2	H371	(3)
Xn; R68/21		STOT SE 2	H371	(3)
Xn; R68/22		STOT SE 2	H371	(3)
Carc. Cat. 1; R45		Carc. 1A	H350	
Carc. Cat. 2; R45		Carc. 1B	H350	
Carc. Cat. 1; R49		Carc. 1A	H350i	
Carc. Cat. 2; R49		Carc. 1B	H350i	
Carc. Cat. 3; R40		Carc. 2	H351	
Muta. Cat. 2; R46		Muta. 1B	H340	
Muta. Cat. 3; R68		Muta. 2	H341	
Repr. Cat. 1; R60		Repr. 1A	H360F	(4)
Repr. Cat. 2; R60		Repr. 1B	H360F	(4)
Repr. Cat. 1; R61		Repr. 1A	H360D	(4)
Repr. Cat. 2; R61		Repr. 1B	H360D	(4)
Repr. Cat. 3; R62		Repr. 2	H361f	(4)
Repr. Cat. 3; R63		Repr. 2	H361d	(4)
Repr. Cat. 1; R60 - 61		Repr. 1A	H360FD	
Repr. Cat. 1; R60 Repr. Cat. 2; R61		Repr. 1A	H360FD	
Repr. Cat. 2; R60		Repr. 1A	H360FD	

Repr. Cat. 1; R61				
Repr. Cat. 2; R60 – 61		Repr. 1B	H360FD	
Repr. Cat. 3; R62 – 63		Repr. 2	H361fd	
Repr. Cat. 1; R60 Repr. Cat. 3; R63		Repr. 1A	H360Fd	
Repr. Cat. 2; R60 Repr. Cat. 3; R63		Repr. 1B	H360Fd	
Repr. Cat. 1; R61 Repr. Cat. 3; R62		Repr. 1A	H360Df	
Repr. Cat. 2; R61 Repr. Cat. 3; R62		Repr. 1B	H360Df	
N; R50		Aquatic. Acute 1	H400	
N; R50-53		Aquatic Acute 1 Aquatic Chronic 1	H400 H410	
N; R51-53		Aquatic Chronic 2	H411	
R52-53		Aquatic Chronic 3	H412	
R53		Aquatic Chronic 4	H413	
N; R59		Ozone	H420	

Note 1

For these classes it is possible to use the recommended minimum classification as defined in section 1.2.1.1 in Annex VI. Data or other information may be available to indicate that re-classification in a more severe category is appropriate.

Note 2

It is recommended to classify in Category 1B even if it also could be possible that 1C could be applicable for certain cases. Going back to original data, may not result in a possibility to distinguish between Category 1B or 1C, since the exposure period has normally been up to 4 hours according to Regulation (EC) No 440/2008. However, for the future, when data are derived from tests following a sequential approach as foreseen in the Regulation (EC) No 440/2008, Category 1C should be considered.

Note 3

The route of exposure could be added to the hazard statement if it is conclusively proven that no other routes of exposure cause the hazard.

Note 4

Hazard statements H360 and H361 indicate a general concern for both the reproductive properties related to fertility and developmental effects; "May damage/Suspected of damaging fertility or the unborn child". According to the classification criteria (Annex I, section 3.7) the general hazard statement can be replaced by the hazard statement indicating only the property of concern, in case either fertility or developmental effects are proven to be not relevant.

Table 1.2

Translation between risk phrases assigned under Directive 67/548/EEC and supplementary labelling requirements under this Regulation

Directive 67/548/EEC	This Regulation
R1	EUH001
R6	EUH006
R14	EUH014
R18	EUH018
R19	EUH019
R44	EUH044
R29	EUH029
R31	EUH031
R32	EUH032
R66	EUH066
R39-41	EUH070