

Guidance on Labelling and Packaging in accordance with Regulation (EC) No 1272/2008 (draft)



For manufacturers, importers, downstream users and distributors of substances and mixures

LEGAL NOTICE

This document contains guidance on the labelling and packaging requirements under Regulation (EC) No. 1272/2008 on the classification, labelling and packaging of substances and mixtures (CLP Regulation).

The users are reminded that the text of the CLP Regulation is the only authentic legal reference and that the information in this document does not constitute legal advice. The European Chemicals Agency does not accept any liability with regard to the contents of this document.

Guidance on Labelling and Packaging under the CLP Regulation

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Preamble

This document is addressed to manufacturers, importers, downstream users and distributors of chemical substances and mixtures. It provides guidance on the labelling and packaging rules for substances and mixtures as set out in Titles III and IV of Regulation (EC) No 1272/2008 (CLP Regulation) which entered into force on 20 January 2009.

This document goes beyond the relevant sections on CLP hazard labelling as presented in the Introductory Guidance on the CLP Regulation and the Guidance on the Application of the CLP Criteria as it further specifies and explains the application and arrangement of the CLP label elements on the hazard label for substances and mixtures. Its content replaces Part 5 (Labelling) and Annex V (Selection of precautionary statements) of the Guidance on the Application of the CLP Criteria.

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1 1. INTRODUCTION

2 1.1 Who should read this document?

- 3 This document is relevant for suppliers of chemical substances and mixtures, namely for
- manufacturers and importers of substances,
- 5 importers of mixtures,
- downstream users of substances and mixtures (including formulators),
- distributors of substances and mixtures, including retailers.

8 These suppliers must label and package their substances and mixtures in accordance with the

provisions of Regulation (EC) No 1272/2008 (CLP Regulation or CLP) before they are placed on

10 the EU market.

11 **1.2 What is in this document?**

12 This document will provide guidance on the labelling and packaging requirements set out in the 13 CLP Regulation. It builds on the overview provided in sections 14 to 16 of the Introductory 14 Guidance on the CLP Regulation as already published on the website of the European 15 Chemicals Agency, see http://guidance.echa.europa.eu/docs/guidance_document/clp_en.htm.

- 16 In particular, this guidance will clarify:
- what aspects to consider when estimating **the label size** needed,
- what types of supplemental information are possible, and where to place this information on the label, see section 4.8 below;
- the conditions for small packaging exemptions;
- the interaction between **CLP and the transport labelling rules**;
- how to select the most appropriate set of **precautionary statements** for the label.
- 23 Examples illustrating these topics are provided in sections 6 and 7 of this guidance document.

1 **2. GENERAL OVERVIEW**

2 2.1 Legal background

Regulation (EC) No 1272/2008 (CLP Regulation or CLP) is the new EU legislation on classification, labelling and packaging of substances and mixtures. It entered into force on 20 January 2009 in the European Union¹ and it is directly applicable to companies which manufacture, import, use or distribute chemical substances and mixtures. The new Regulation will replace the provisions of the Dangerous Substances Directive 67/548/EEC (DSD) and the Dangerous Preparations Directive 1999/45/EC (DPD) in a stepwise approach; the latter directives will finally be repealed on 1 June 2015.

CLP introduces several new aspects to the labelling and packaging of substances and mixtures.
 This guidance will explain the new labelling and packaging rules of CLP and the challenges they
 bring, and will illustrate with some examples how labels could be laid out.

In general, the CLP label should display the label elements which are taken over from the United Nations Globally Harmonized System of classification and labelling of chemicals (UN GHS) i.e. the new pictograms signal word hazard and precautionary statements in order to

GHS), i.e. the new pictograms, signal word, hazard and precautionary statements, in order to reflect the assigned classifications of a substance or mixture. At the same time CLP retains some of the existing labelling concepts of DSD and DPD, such as the small packaging exemptions. In order to retain certain hazard information from DSD which is not (yet) covered by the UN GHS and further label elements which are required by other Community Legislation, CLP introduces the concept of "supplemental information" for the label, which is in line with the provisions of the UN GHS (see point 1.4.6.3 of the UN GHS).

Title III of CLP introduces 'Hazard Communication in the form of labelling'. This wording is to indicate that CLP covers only one aspect of hazard communication, namely the hazard label. Another key element of hazard communication is the Safety Data Sheet whose general format and content are set out in Article 31 and in Annex II to Regulation (EC) No 1907/2006 (REACH). It should be noted that Annex II to REACH has recently been adapted through Commission Regulation (EU) No 453/2010, in order to incorporate the Safety Data Sheet rules set out in the UN GHS, see

- 29 <u>http://ec.europa.eu/enterprise/sectors/chemicals/documents/reach/review-</u>
- 30 annexes/index en.htm#h2-annex-ii
- CLP Article 57(2) sets out in which situations the CLP-related information has to be provided in
 Safety Data Sheets for substances and mixtures.
- The Agency is currently preparing a separate guidance document on the compilation of SafetyData Sheets.

¹ Once the EFTA States that are signatories to the EEA Agreement (these are currently Iceland, Liechtenstein and Norway) have incorporated the CLP Regulation into their national legislation, references in this document to 'the EU' and 'the Member States' should be read to include the corresponding countries.

2.2 Scope of labelling and packaging under the CLP Regulation

In general, substances and mixtures that are placed on the market are supplied in packaging
 with the necessary labelling information. A substance or mixture contained in packaging should
 be labelled according to the CLP rules where

- the substance or mixture is classified as hazardous;
- a mixture, even if not classified as hazardous, is addressed in Part 2 of Annex II to CLP.
 In this case the supplemental label elements as set out in that part shall be applied.

8 In addition, an explosive article which meets the criteria as described in Part 2.1 of Annex I to 9 CLP will need to be labelled according to the CLP rules. Other articles do not need to be 10 labelled under the CLP Regulation; for a clarification what is considered to be an article see also 11 the Guidance on requirements on substances in articles on the Agency's website 12 (http://guidance.echa.europa.eu/guidance_en.htm).

13 Substances and mixtures within the scope of Regulation (EC) No 1107/2009 (Plant Protection 14 Products Regulation) or Directive 98/8/EC (Biocidal Products Directive) have to be labelled in 15 accordance with the CLP rules as any other substance or mixture within the scope of CLP. Any 16 additional labelling information required by these pieces of legislation will be supplemental 17 information for the purposes of CLP, see section 4.8 of this document. However, there are 18 separate provisions for updating labels for such substances and mixtures in these acts, and 19 their suppliers should, pursuant to CLP Article 30(3), apply these provisions instead of the CLP 20 rules.

Certain substances and mixtures may also be supplied to the general public without packaging in which case a copy of the label elements is required to accompany the substance or mixture, for example on an invoice, see CLP Article 29(3) and Part 5 of Annex II to CLP. Currently this only applies to ready mixed cement and concrete in the wet state, see also section 5.3.2.2. below.

Finally, CLP Article 23 and section 1.3 of Annex I to CLP define derogations from the CLP labelling requirements for special cases and the conditions where these derogations apply. They define either the application of selected labelling elements or even allow the omission of CLP labelling. The special cases include

- Transportable gas cylinders, see the specifications set out in point 1.3.1 of Annex I to CLP;
- Gas containers intended for propane, butane or liquefied petroleum gas, see the specifications set out in point 1.3.2 of Annex I to CLP;
- Aerosols and containers fitted with a sealed spray attachment and containing substances and mixtures classified as presenting an aspiration hazard, see the specifications set out in point 1.3.3 of Annex I to CLP;
- Metals in massive form, alloys, mixtures containing polymers, mixtures containing elastomers, see the specifications set out in point 1.3.4 of Annex I to CLP;
- Explosives, as referred to in section 2.1 of Annex I to CLP which are placed on the market with a view to obtaining an explosive or pyrotechnic effect, see the specifications set out in point 1.3.5 of Annex I to CLP.

1 In relation to the afore-mentioned special cases, further guidance will not be provided in this 2 document as the explanations given in section 1.3 of Annex I to CLP are considered sufficient.

3 2.3 Timelines for classification, labelling, packaging and updating of CLP hazard 4 labels

5 The CLP Regulation sets out a phased transitional period when the rules of both CLP and the 6 previous legislation on classification, labelling and packaging, i.e. the DSD and DPD directives, 7 will be applicable in parallel. In relation to classification, labelling and packaging, CLP sets out 8 different timelines for substances and mixtures. This is to give companies time to migrate from 9 the DSD/DPD system to the CLP rules. However, they have been allowed to apply CLP in full 10 on a voluntary basis since its entry into force, see CLP Article 61.

11 For substances, the deadline for classification, labelling and packaging according to the CLP 12 rules was 1 December 2010. Nevertheless, they still need to be classified according to DSD as 13 well until 1 June 2015. In cases where a substance has already been classified, labelled and 14 packaged according to CLP before 1 December 2010, only the CLP label shall appear, and not 15 the label according to DSD or any combination of DSD and CLP label elements. Where a substance is already classified, labelled and packaged according to the DSD rules and placed 16 17 on the market before 1 December 2010, i.e. it is already in the supply chain by that date, the 18 manufacturer, importer or distributor may postpone its re-labelling and re-packaging (but not the 19 re-classification!) according to the CLP rules until 1 December 2012. This means that the 20 substance can be sold further in the supply chain with the DSD label until 1 December 2012. 21 However, in cases where a substance is re-filled into another packaging on its way through the 22 supply chain and the respective supplier (re-filler) changes the packaging such that other 23 labelling elements become necessary, he should adapt the label to the CLP requirements on 24 this occasion and not use the DSD labelling any longer.

25 For mixtures, the deadline for classification, labelling and packaging according to the CLP rules 26 is 1 June 2015. Until then, they need to be classified, labelled and packaged according to DPD. 27 In cases where a mixture has already been classified, labelled and packaged according to CLP 28 before 1 June 2015, only the CLP label shall appear, and not the label according to DPD. 29 Where a mixture is already classified, labelled and packaged according to the DPD rules and 30 placed on the market before 1 June 2015, i.e. it is already in the supply chain by that date, the 31 manufacturer, importer, downstream user or distributor may postpone its re-labelling and repackaging (but not the re-classification!) according to the CLP rules until 1 June 2017. This 32 33 means that the mixture can be sold further in the supply chain with the DPD label until 1 June 34 2017. However, in cases where a mixture is re-filled into another packaging on its way through 35 the supply chain and the respective supplier (re-filler) changes the packaging such that other 36 labelling elements become necessary, he should adapt the label to the CLP requirements on 37 this occasion and not use the DPD labelling any longer.

An overview of the relevant timelines for classification and labelling is provided in the Figure below:

1

	Legislation	From 20 January 2009	From 1 December 2010	From 1 June 2015	
	Directive 67/548/EEC	Classification required			
Substances	(DSD)	Labelling required (if not CLP labelled)	No labelling unless the derogation applies	Repealed	
Subs	Regulation EC No 1272/2008	Classification possible	Classification required		
	(CLP)	Labelling possible	Labelling required unless th	e 2012 derogation applies	
	1999/45/EC	Classification required			
res	(DPD)	Labelling required (if not CLP labelled)		Repealed	
Mixtures	Regulation	Classification possible		Classification required	
2	EC No 1272/2008 (CLP)	Labelling possible		Labelling required unless the 2017 derogation applies	

2 Figure 1: Timelines for classification and labelling in accordance with CLP and DSD/DPD

3 CLP Article 30 requires a supplier to update any information on the label without undue delay, 4 i.e. as soon as reasonably practicable, following any changes to the classification and labelling 5 where the revised classification is more severe or where new supplemental label elements are 6 required under CLP Article 25(1) and (2). However, there are separate provisions for updating 7 labels in Directive 98/8/EC (Biocidal Products Directive) and Regulation (EC) No 1107/2009² 8 (Plant Protection Products Regulation), and suppliers of substances or mixtures within the 9 scope of these acts should apply these provisions instead.

Where other changes to the label are involved, e.g. where the revised classification will be less severe or the contact details of the supplier have changed, the supplier has 18 months to update the label. This would also include the update of labelling information for certain mixtures not classified as hazardous but where special rules for supplemental labelling in accordance with Part 2 of Appendix

14 with Part 2 of Annex II to CLP apply.

² Regulation (EC) No 1107/2009 of the European Parliament and of the Council of 21 October 2009 concerning the placing of plant protection products on the market repeals Council Directives 79/117/EEC and 91/414/EEC with effect from 14 June 2011. However Article 80 of Regulation (EC) No 1107/2009 specifies that directive 91/414/EEC shall continue to apply with respect to active substances included in Annex I to that Directive for certain transitional periods.

13. PRINCIPALREQUIREMENTSOFLABELLINGAND2PACKAGING IN ACCORDANCE WITH THE CLP REGULATION

3 **3.1 General labelling rules**

4 General and specific rules regarding the application and content of a CLP label are set out in 5 CLP Title III, Chapters 1 and 2, respectively.

As a general rule, CLP requires labels to be firmly affixed to one or more surfaces of the packaging immediately containing the substance or mixture and that they shall be readable horizontally when the package is set down normally, see CLP Article 31(1). The label elements themselves, in particular the hazard pictograms, should stand out clearly from the background, see CLP Article 31(2) and (3). Furthermore, all label elements should be of such size and spacing as to be easily read. A physical label is not required when the label elements are shown clearly on the packaging itself, see CLP Article 31(5).

13 **3.2 Elements of the CLP hazard label**

According to CLP Article 17, a substance or mixture classified as hazardous shall bear a label including the following elements:

- Name, address and telephone number of the supplier(s);
- The nominal quantity of the substance or mixture in the package where this is being made available to the general public, unless this quantity is specified elsewhere on the package;
- Product identifiers;
- Hazard pictograms, where applicable;
- The relevant signal word, where applicable;
- Hazard statements, where applicable;
- Appropriate precautionary statements where applicable;
- A section for supplemental information, where applicable.
- It should be noted that for particular label elements precedence rules apply. These rules arefurther explained in the sections below.

28 CLP states that the label shall be written in the official language or languages of the Member 29 States(s) where the substance or mixture is placed on the market, unless the Member State(s) 30 concerned provide otherwise. Suppliers may accomplish this either by producing a single multi-31 language label covering all the official languages in countries where the substance or mixture is 32 supplied, or by producing separate labels for each country, each with the appropriate language 33 or languages. Suppliers may use more languages on their labels if they wish, provided that the 34 same details appear in all languages. However, this should not impact the legibility of the 35 obligatory labelling information nor can it trigger exemptions from the labelling requirements as 36 set out under CLP Article 29, see section 5.3 of this document.

1 3.3 Location of information on the CLP hazard label

2 CLP Article 32 provides some limited rules that define the location of information on the label.

3 However, further details as to how label elements are arranged are left to the discretion of the 4

person(s) responsible for compiling the label, as outlined in the table below:

- 5 6
- Table 1: CLP labelling requirements versus discretion of the supplier

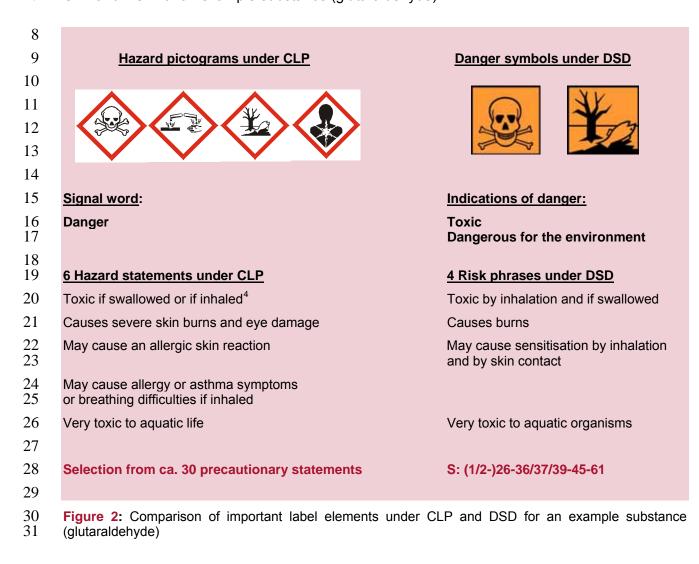
CLP requirement (Article 32)	Example of decision left to the discretion of the supplier
The hazard pictograms, signal word, hazard statements and precautionary statements should be kept together on the label.	The supplier is free to choose the arrangement of the pictograms.
Hazard statements should be grouped together on the label while the order of the hazard statements can be chosen freely.	The supplier may choose whether these groups are to be presented on the left, on the right or elsewhere on the label.
Precautionary statements should be grouped together on the label while the order of the precautionary statements can be chosen freely.	The supplier may choose whether these groups are to be presented on the left, on the right or elsewhere on the label.
In case more than one language is used on the label, the hazard and precautionary statements of the same language should be grouped together on the label.	Where the supplier needs to use alternative means to meet the requirements of CLP Article 31 in relation to the language(s) required in a particular Member State, he may choose whether to accomplish this using fold-out labels, tie-on tags or on an outer packaging, in accordance with section 1.5.1 of Annex I
Any supplemental information as referred to in CLP Article 25 should be included in the section for supplemental labelling and placed alongside the label elements referred to in CLP Article 17(1)(a)– (g).	The supplier may choose how to visibly separate this section from the section containing the label elements referred to in CLP Article 17(1)(a)-(g). He may also decide to place this information in more than one location on the label.

7 3.4 First experiences with the CLP labelling rules

8 First experiences with the application of the CLP labelling rules suggest that the information 9 required on the CLP label will increase compared to the DSD/DPD regime, requiring further 10 space on the label. One reason for this is that additional pictograms are required under CLP, compared to DSD/DPD. Similarly, the new signal word will consume additional space. Where 11 12 mixtures have to be classified on the basis of the calculation methods, lower generic 13 concentration limits trigger additional classification and labelling compared to DSD/DPD, which 14 means that further hazard and precautionary statements must be put on the label. Moreover, 15 combined hazard statements that would condense the message and save valuable label space 16 are normally not foreseen under CLP, see section 4.5 of this document.

In relation to precautionary statements, CLP provides for far more precautionary statements compared to the number of safety phrases that are available under DSD/DPD. On the other hand, less prescriptive selection rules under CLP compared to DSD make it more difficult to arrive at the target number of six precautionary statements on the label as intended by CLP, see section 4.6 and section 7 of this document.

6 For illustration purposes Figure 2 below shows a comparison of important label elements³ under 7 CLP and DSD for an example substance (glutaraldehyde):



³² The example above suggests that in future, optimum use of the available space on the label

may be a greater challenge than is the case under the DSD/DPD labelling regime. Under CLP, alternative ways of labelling and the use of the labelling derogations as offered by the CLP

alternative ways of labelling and the use of the labelling derogations as offered by the CLP

³ Figure 2 is not intended to be a label that complies with the provisions of the CLP Regulation, but is meant to present a rough overview of applicable label elements only.

⁴ This combined hazard statement is one of the few that are foreseen under the 2^{nd} ATP to CLP.

- 1 Regulation will have to be accompanied by further layout efforts in order to save labelling space 2
- while remaining compliant with the requirements of CLP.

7

8

3 3.5 CLP rules on packaging of substances and mixtures

4 CLP Article 35 includes the packaging requirements carried forward from the DSD/DPD. In 5 addition to the labelling rules, these packaging provisions need to be considered carefully when 6 a packaging contains a hazardous substance or mixture. These provisions are to ensure that

- the packaging is designed, constructed and fastened so that the contents cannot escape;
- 9 the materials of the packaging and fastening are not damaged by the contents and are • 10 not liable to form hazardous compounds with the contents;
- 11 the packaging does not attract or arouse the curiosity of children or mislead the • 12 consumer.
- 13 It should be noted that packaging meeting the transport rules is deemed to comply with the 14 requirements set out in the bullet points above.
- 15 For substances and mixtures to be supplied to the general public, CLP sets out rules for
- 16 the use of child-resistant fastening (CRF), see section 3.1 of Annex II, and for •
- 17 • the use of tactile warnings of danger (TWD), see section 3.2 of Annex II.

18 These provisions are triggered by either a specific hazard class/category or by the concentration 19 of specific substances contained in other substances or in mixtures, see Tables 2 and 3 on the next pages. For both CRF (also sometimes referred to as child-resistant closure - CRC) and 20 21 TWD, CLP requires conformity with certain standards, relating to reclosable and non-reclosable 22 packaging and to tactile warning devices. These standards are explicitly mentioned in Part 3 of 23 Annex II to CLP. Conformity with these standards may only be certified by laboratories which 24 conform to EN ISO/IEC 17025 as amended.

Hazard Class (Category)	Child-resistant Fastenings	Tactile Warnings*
Acute toxicity (category 1 to 3)	√	~
Acute toxicity (category 4)		~
STOT-SE (category 1)	✓	~
STOT-SE (category 2)		1
STOT-RE (category 1)	✓	~
STOT-RE (category 2)		1
Skin corrosion (category 1A, 1B and 1C)	✓	~
Respiratory sensitisation (category 1)		1
Aspiration hazard (category 1) Note that a CRF is not required if the substance or mixture is supplied in an aerosol dispenser or in a container with sealed spray attachment	~	~
Germ cell mutagenicity (category 2)		~
Carcinogenicity (category 2)		1
Reproductive toxicity (category 2)		1
Flammable gases (category 1 and 2)		1
Flammable liquids (category 1 and 2)		1
Flammable solids (category 1 and 2)		~

 Table 2: The hazard classifications that trigger the CLP provisions for child-resistant fastenings and/or tactile warnings

* Note that the TWD provisions do not apply to aerosols which are only classified and labelled as extremely flammable or flammable aerosols.

(draft)

Table 3: Substances that trigger the CLP provisions for child-resistant fastenings and/or tactile warnings when they are contained in other substances or in mixtures at or above the denoted concentration

Identification of the substance	Concentration limit	Child- resistant Fastenings	Tactile Warnings
Methanol*	≥ 3%	√	
Dichloromethane	≥1%	√	

* It should be noted that above a certain concentration, methanol mixtures also need a tactile warning because the mixture would then have to be classified as flammable liquid, cat. 2.

4. RULES FOR THE APPLICATION OF THE CLP LABEL 1 **ELEMENTS** 2

3 4.1 Contact details of the supplier

4 According to CLP Article 17, the contact details of one or several suppliers should be 5 included on the label. In principle, there can be more than one supplier of the same 6 substance or mixture in the supply chain, e.g. in case a mixture has been supplied by the formulator to a distributor who would supply it to third parties as well. However, 7 8 CLP Article 17 does not specify whether the contact details of both suppliers are 9 needed in such cases nor does it specify whether the contact details of one particular 10 supplier have precedence.

11 Pursuant to CLP Article 4(4), a supplier shall ensure that a hazardous substance or mixture is labelled and packaged in accordance with Titles III and IV of the CLP 12 13 Regulation before he places it on the market. On the way through the supply chain 14 the labelling for the same substance or mixture may vary upon the volume of the 15 packaging or as a consequence of further layers of packaging, see also sections 5.3 16 and 5.4 of this document. Where a supplier changes the packaging such that the 17 label elements set out in CLP Article 17 have to be displayed differently than on the 18 label/packaging supplied to him, he should add his own name and contact 19 information or replace the contact information of his supplier with his own contact 20 details because he has taken the responsibility for re-packing and re-labelling the 21 substance or mixture. Where he does not change the packaging such that changes 22 to the labelling become necessary, he does not need to add his contact details to the 23 label nor replace the contact information of his supplier with his own contact details, 24 but is allowed to do so. In case he exchanges the languages(s) displayed on a label, 25 he should add his contact details to the contact details of the relevant supplier who issued the original label, as he is responsible for the correct translation of the label 26 27 content.

4.2 Product identifiers 28

29 As a general rule, the same product identifiers as mentioned in the Safety Data 30 Sheets should be used on the hazard label for a substance or mixture.

31 According to CLP Article 18(2), product identifiers for substances should include at 32 least:

33 34

a name and an identification number as given in Part 3 of Annex VI to CLP. • The name is the International Chemical Identification that is stated in column 35 2 of the tables in Part 3 of Annex VI to CLP. The identification number is 36 typically either the Index number, the EC number or the CAS number. It is 37 recommended to use the number that warrants an unambiguous identification 38 of the substance; in some cases it may be warranted to use two numbers, 39 e.g. the CAS and the Index number. When a substance name from Annex VI 40 is used, this name should be translated into the language(s) required for the 41 label in the Member State where the substance or mixture is placed on the 42 market; or

- if the substance is not included in Part 3 of Annex VI to CLP, a name and an 1 • 2 identification number as they appear in the Classification and Labelling 3 Inventory. The name is typically either the IUPAC name⁵, the EC name or the 4 CAS name. The identification number should either be the Inventory 5 reference number, the EC or the CAS number. It is recommended to use the 6 number or even numbers that warrant(s) an unambiguous identification of the 7 substance. It should be noted that in practice it is unlikely to be convenient to 8 choose the Inventory reference number as this may not have been available 9 by the time when the relevant Safety Data Sheet was prepared. Instead, choice of an identifier such as (where applicable) EC number or CAS number 10 may be advisable, in order to minimise the need for revision of the Safety 11 12 Data Sheet: or
- if the substance is neither included in Part 3 of Annex VI to CLP nor in the Classification and Labelling Inventory, the CAS number and the IUPAC name, or the CAS number and another international chemical name, e.g. the name in INCI nomenclature⁶, where applicable. It may be assumed that this concerns substances that are for the first time manufactured in the EU or imported, but which have not been notified yet.; or
- if no CAS number is available and none of the above apply, the IUPAC name or another international chemical name, e.g. the name in INCI nomenclature where applicable.
- 22 According to CLP Article 18(3), product identifiers for <u>mixtures</u> should include both:
- the trade name or the designation of the mixture; and
- 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.

As to the second bullet relating to mixture labels, the chemical names selected should identify the substances primarily responsible for the major health hazards which have caused the classification of the mixture and the assignment of the corresponding hazard statements.

To reduce the number of substance ('chemical') names on the label, no more than four names should be provided on the label for a mixture, unless necessary due to the nature and severity of the hazards. This may be the case where a mixture contains more than four substances which are all present in significant concentrations so that they contribute to the classification of the mixture for one or several of the hazards mentioned under the second bullet above.

39 Sometimes a manufacturer, importer or downstream user may conclude that certain 40 substance identifiers for a substance contained in a mixture that are required for the 41 label or the Safety Data Sheet will put the confidential nature of his business or 42 intellectual property rights at risk. In such cases he can direct a request to use an 43 alternative chemical name for that substance to the Member State Competent

⁵ Where the IUPAC name exceeds 100 characters, suppliers can use one of the other names (usual name, trade name or abbreviation) referred to in section 2.1.2 of Annex VI REACH provided that a C&L notification to the Agency, in accordance with CLP Article 40(1)(b), includes both the IUPAC name and the other name used.

⁶ INCI means International Nomenclature of Cosmetic Ingredients

1 Authority under the provisions of DPD Article 15. Where the corresponding mixture 2 has already been classified, labelled and packaged in accordance with CLP before 1 3 June 2015, as well as after that date, this request should be submitted to the Agency. 4 The alternative name should be a more general name identifying the most important 5 functional groups or an alternative designation, see CLP Article 24. Such requests shall be accompanied by a fee, in accordance with Article 3 of Commission 6 7 Regulation (EU) No 440/2010. The corresponding IT tools as well as an explanatory 8 document will be made available by the European Chemicals Agency.

9 **4.3 Hazard pictograms**

A hazard pictogram is meant to be a pictorial presentation of a particular hazard, see 10 also the definition provided in CLP Article 2(3). According to CLP Article 19, the 11 12 classification of a substance or mixture determines the hazard pictograms that should 13 be displayed on a label, as set out in parts 2 (physical hazards), 3 (health hazards) 14 and 4 (environmental hazards) of Annex I to CLP. The assignment of hazard 15 pictograms to specific hazard classes and categories/differentiations can also be found in Annex V to CLP. Currently there are nine different pictograms. While 16 17 normally only one pictogram is assigned to a certain hazard class or category, few 18 hazard differentiations have to carry two pictograms, namely substances and 19 mixtures classified as self-reactive Type B or as organic peroxide Type B, see also 20 below.

21 The colour and presentation of a label should allow the hazard pictogram and its 22 background to be clearly visible, see CLP Article 31(2). Hazard pictograms should be 23 in the shape of a square set at a point, i.e. they should appear as a diamond shape 24 when the label is read horizontally, and should have a black symbol on a white 25 background with a red border (see section 1.2.1 of Annex I to CLP). The exact type 26 of red, i.e. the Pantone colour number, is not defined, and labellers are free to use 27 their discretion: Each hazard pictogram⁷ should cover at least one fifteenth of the 28 surface area of the label dedicated to the information required by CLP Article 17, but 29 the minimum area shall not be less than 1 cm^2 .

The pictograms are provided free of charge for download from the website <u>http://www.unece.org/trans/danger/publi/ghs/pictograms.html</u>. An example is the exclamation mark (pictogram GHS07), which is assigned to various health hazard classes and categories of lower severity, see Part 2 of Annex V to CLP:



34

For substances and mixtures classified for more than one hazard, several pictograms may be required for the label. In such cases it should be checked whether the precedence rules set out in CLP Article 26 apply. As a general rule, the pictograms which reflect the most severe hazard category of each hazard class should be included on the label. This would also apply where a substance has both a harmonised and a non-harmonised (i.e. self-) classification, see CLP Article 26(2).

⁷ The size of the pictogram relates here to the dimensions of the pictogram itself, and not to the size of the virtual square where the pictogram is in.

- 1 Further to this, CLP sets out precedence rules relating to particular hazard 2 pictograms and classifications:
- **For physical hazards**, if the label carries the pictogram GHS01 (exploding bomb), then GHS02 (flame) and GHS03 (flame over circle) are optional ...
- 5

6 7



- 8 ... except in cases where more than one pictogram is compulsory,
 9 namely for substances and mixtures classified as self-reactive Type B or as
 10 organic peroxide Type B, see Annex I to CLP;
- For physical and health hazards, if the label carries the pictogram GHS02
 (flame) or GHS06 (skull and crossbones), then GHS04 (gas cylinder) is optional
 ...
- 14







- 16
- For health hazards, if the label carries the pictogram GHS06 (skull and
- 18 crossbones), then GHS07 (exclamation mark) should not appear:
- 19



or

- 20 21
- **For health hazards**, if the label carries the pictogram GHS05 (corrosion), then GHS07 (exclamation mark) should not be used for skin or eye irritation ...
- 24



27 ... but still has to be used for other hazards;

28

25 26

1 For health hazards, if the label carries the pictogram GHS08 (health hazard) for • 2 respiratory sensitisation, then GHS07 (exclamation mark) should not be used for 3 skin sensitisation or for skin or eye irritation ...

4



5 6

7

... but still has to be used for other hazards.

8 Please note that the transport rules on labelling may apply to your substance or 9 In certain cases, a particular CLP hazard pictogram on the mixture as well. 10 packaging may be omitted, see CLP Article 33.

11 In case a substance or mixture is assigned the supplemental hazard statement 12 EUH071 ("Corrosive to the respiratory tract"), a corrosivity pictogram (GHS05) may 13 be assigned, see Note 1 of Table 3.1.3 of Annex I to CLP. Where this is done, the 14 pictogram GHS07 for STOT, single exposure, category 3 (respiratory tract irritation) 15 can be omitted from the label, as well as the hazard statement H335 ("May cause 16 respiratory irritation"), see below.

17 For substances and mixtures that have to be labelled both in accordance with the 18 CLP Regulation and with the rules on the transport of dangerous goods, the CLP 19 pictograms may be omitted from the label where a similar transport pictogram 20 appears, see also CLP Article 33 and section 5.4 of this document.

21 4.4 Signal words

22 A signal word indicates the severity of a particular hazard. The label should include 23 the relevant signal word in accordance with the classification of the hazardous 24 substance or mixture: more severe hazards require the signal word 'danger' while 25 less severe hazards require the signal word 'warning', see CLP Article 20.

26 The signal word relevant for each specific classification is set out in the tables 27 indicating the label elements required for each hazard class as set out in parts 2 to 5 28 of Annex I to CLP. Some hazard categories (for example explosives, division 1.6) do 29 not have a signal word.

30 Where a substance or mixture is classified for more than one hazard, the label 31 should only bear one single signal word. In such cases, the signal word 'danger' 32 should take precedence.

4.5 Hazard statements 33

34 CLP hazard labels should also bear the relevant hazard statements describing the 35 nature and severity of the hazards of a substance or mixture, see CLP Article 21. An 36 example is the hazard statement assigned to acute oral toxicity, category 4: "Harmful 37 if swallowed" (H302).

38 The hazard statements relevant for each hazard class and category/differentiation 39 are set out in the tables contained in parts 2 to 5 of Annex I to CLP. For most hazard

statements, the wording can be taken as stated in Table 1.2 of Annex III to CLP. For some health hazard statements, the route of exposure or the target organ may have to be included in the statement as well, e.g. "Causes damage to the liver via ingestion" (H370) for STOT-SE, category 1. See also section 4.8 of this document.

5 If a substance classification is harmonised and included in Part 3 of Annex VI to CLP, 6 the corresponding hazard statement(s) relevant for this classification should be used 7 on the label. Note that some classifications in Part 3 of Annex VI to CLP are 8 minimum classifications, in which case a more severe classification as well as the 9 corresponding hazard statement may have to be assigned. Also, hazard statements 10 may need to be included for non-harmonised hazards which are not covered in the 11 Annex VI listing, see CLP Article 4(3).

12 It should be noted that in contrast to DSD, combined hazard statements are currently 13 not foreseen under CLP. Nevertheless, some combined hazard statements have already been agreed at UN level and published in the 3rd revised edition of the UN 14 GHS – these are applicable when the 2nd Adaptation to Technical Progress (ATP) to 15 16 the CLP Regulation has entered into force. This means that from 1 December 2012 17 for substances and from 1 June 2015 for mixtures the hazard statements relating to 18 different routes of exposure, but to the same category, can appear as combined 19 statements on the label and in the Safety Data Sheet, e.g. H301+H311 for category 3 20 for the oral and dermal route: "Toxic if swallowed or in contact with skin".

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, see CLP Article 27. This will also apply to a substance or mixture which is assigned the supplemental hazard statement EUH071 ("Corrosive to the respiratory tract"): in this case, the hazard statement H335 ("May cause respiratory irritation") for STOT, single exposure, category 3 (respiratory tract irritation) can be omitted from the label.

Annex III to CLP lists, in all languages, the correct wording of the hazard statements as it should appear on the label. The hazard statements of one language should be grouped together with the precautionary statements of the same language on the label, see also section 3.3 above.

32 **4.6 Precautionary statements**

33 CLP hazard labels should bear the relevant precautionary statements giving advice 34 on measures to prevent or minimise adverse effects to human health or the 35 environment arising from the hazards of a substance or mixture, see CLP Article 22. 36 An example is the precautionary statement "DO NOT fight fire when fire reaches 37 explosives." (P373). The complete set of precautionary statements relevant for each 38 hazard class and category/differentiation is listed by alphanumeric code in the tables 39 indicating the label elements required for each hazard class in parts 2 to 5 of Annex I 40 to CLP.

41 Precautionary statements should be selected in line with the generic provisions set 42 out in CLP Article 22 and 28 and with Part 1 of Annex IV to CLP: any selection 43 should take into account the hazard statements used, the intended or identified use 44 or uses of the substance or mixture as well as the basic instructions specified in the 45 "conditions for use" columns in tables 6.1 – 6.5 of Annex IV to the CLP Regulation. Doubling and redundancy should be avoided. Where the substance or mixture is 46 47 supplied to the general public, one precautionary statement addressing the disposal 48 of that substance or mixture as well as the disposal of packaging shall in general

1 appear on the label, see CLP Article 28(2). Normally, not more than six precautionary

2 statements should appear on the label, unless necessary to reflect the nature and the

3 severity of the hazards.

4 In order to provide assistance with the selection of the most appropriate 5 precautionary statements, pertinent guidance is provided in section 7 of this 6 document.

Part 2 of Annex IV to CLP lists, in all languages, the correct wording of the
precautionary statements as it should appear on a label. The precautionary
statements of one language should be grouped together with the hazard statements
of the same language on the label, see also section 3.3 above.

11 **4.7 Codes for hazard and precautionary statements**

12 Hazard and precautionary statements are codified using a unique alphanumerical 13 code which consists of one letter and three numbers, as follows:

- the letter "H" (for "hazard statement") or "P" (for "precautionary statement").
 Please note that hazard statements carried through from DSD and DPD, but
 which are not yet included in the GHS are codified as "EUH";
- for hazard statements, a digit designating the type of hazard, e.g. "2" for physical hazards; and two digits corresponding to the sequential numbering of hazards, such as explosivity (codes from 200 to 210), flammability (codes from 220 to 230), etc.
- for precautionary statements, a digit reflecting one of five types of statements, namely general statements (1), prevention statements (2), response statements (3), storage statements (4) and disposal statements (5), followed by two digits for the sequential numbering of the statements themselves.
- The code ranges for the hazard and precautionary statements under CLP are set out in Table 4 below:

1 Table 4: Code ranges of hazard and precautionary statements under CLP

Hazard Statements: H	Precautionary Statements: P
200 – 299 Physical hazard	100 – 199 General
300 – 399 Health hazard	200 – 299 Prevention
400 – 499 Environmental hazard	300 – 399 Response
	400 – 499 Storage
	500 – 599 Disposal

2 It should be noted that the codes of the hazard and precautionary statements as well

3 as of any supplemental label elements referred to in CLP Article 25(1) are not

4 necessary for the label – CLP only requires the actual phrasing of the applicable

5 statements for the label.

6 **4.8 Supplemental labelling information**

CLP Article 25 introduces the concept of 'supplemental information' which is intended to incorporate additional labelling information over and above that listed in CLP Article 17(a) to (g). This additional labelling information can be divided into two categories, namely obligatory and non-obligatory information. Both types count as 'supplementary information' under CLP and should be located in the section for supplemental information on the label while they should appear in the same languages as the other CLP label elements.

14 The <u>obligatory</u> supplemental labelling information can in principle be:

- (draft)
- Supplemental hazard statements relating to particular physical and health 1 2 properties, which have been taken over from DSD. These are codified as "EUH" 3 statements, e.g. EUH001, see Part I of Annex II, while the code number 4 corresponds to the number of the relevant risk phrase under DSD, i.e. EUH001 5 corresponds to R1 under DSD. For some substances with harmonised 6 classifications, supplemental hazard statements are included in Part 3 of Annex 7 VI;
- 8 Supplemental statements for certain mixtures taken over from DPD, e.g. the • 9 phrase "Contains isocyanates. May produce an allergic reaction" (EUH204), see 10 Part 2 of Annex II to CLP. These phrases are assigned EUH codes as well, to 11 align their presentation with the supplemental hazard statements, see above:
- 12 For the label of substances until 1 December 2012 and of mixtures until 1 June 13 2015: the signal word (Danger) and hazard and precautionary statements 14 relating to the classification "Hazardous to the ozone laver" which has been 15 retained from DSD, see Part 5 of Annex I. The individual labelling elements for 16 this hazard class are subject to the precedence rules set out in CLP Articles 20 and 26-28. After the aforementioned dates and following the adoption of the 2nd 17 18 ATP to the CLP Regulation, this hazard class will be converted into a regular CLP 19 hazard class. This means that the signal word (Warning), the hazard statement 20 H420 (Harms public health and the environment by destroying ozone in the upper 21 atmosphere), the precautionary statement P502 (Refer to manufacturer/supplier 22 for information on recovery/recycling) and the hazard pictogram GHS07 23 (exclamation mark) will have to be applied, in accordance with the provisions of 24 Title III of CLP;
- 25 Specific response information as referred to in the brackets of the precautionary • 26 statements P320 "Specific treatment is urgent (see ... on this label), P321 27 "Specific treatment (see ... on this label)" and P322 "Specific measures (see ... 28 on this label)" in Annex IV to CLP, e.g. "see supplemental first aid instructions on 29 this label" or "see supplemental instructions on the administration of antidotes on 30 this label". See also Table 5 below and the tables in section 7.3 of this document;
- 31 For mixtures containing components of unknown acute toxicity at a concentration • 32 at 1% or greater, the statement "x percent of the mixture consists of 33 component(s) of unknown toxicity", see point 3.1.3.6.2.2 of Annex I to CLP. This 34 statement will also have to be included in the Safety Data Sheet. In this 35 connection, it may be worthwhile to specify the statement as follows: "x percent of 36 the mixture consists of component(s) of unknown acute (oral/dermal/inhalation) 37 toxicity", in particular where the substance is also classified for other hazards and 38 where it is important to specify the route of exposure, see also point 3.1.4.2 of the 39 Guidance on the Application of the CLP Criteria;
- As of 1 June 2015 and following the 2nd ATP to the CLP Regulation: for mixtures 40 • 41 where no useable information on the acute and/or long-term hazard to the 42 aquatic environment is available for one or more of the relevant components, the 43 statement "Contains x percent of components with unknown hazards to the 44 aquatic environment", see the changes to point 4.1.3.6.1 of Annex I to CLP. This 45 statement has currently to be included in the Safety Data Sheet only;
- 46 Label elements required by the applicable Community legislation on plant • 47 protection products, i.e. Directive 91/414/EEC or Regulation (EC) No 1107/2009, 48 e.g. the statements SP1 and SPe3 or EUH401 (see Part 4 of Annex II);

Label elements resulting from other Community acts, see CLP Article 32(6), e.g.
 the authorisation number requested by the REACH Regulation (EC)
 No1907/2006, the listing of surfactants and perfumes according to the Detergents
 Regulation 648/2004, the flammability labelling according to the Aerosol
 Dispensers Directive 75/324/EEC or the content of volatile organic compounds
 (VOC) in accordance with the VOC Directive 2004/42/EC.

7 It should be noted that in some cases additional information to complement a hazard 8 statement may have to be provided, such as the specification of the route of 9 exposure or of the target organ for certain health hazards, i.e. for the CMR and the 10 STOT single and repeated exposure hazard classes. For example, for the STOT repeated exposure hazard class, the hazard statement H372 ("Causes damage to 11 12 organs through prolonged or repeated exposure") should be complemented by the 13 organs affected if known and by the route of exposure if it is conclusively proven that 14 no other routes of exposure cause the hazard. However, this does not constitute 15 supplementary labelling information in the meaning of CLP Article 25. It is rather 16 additional hazard information which is required to be included within the hazard 17 statement itself, beyond the standardised wording as set out in Table 1.2 of Annex III 18 to CLP, see also section 4.5 of this document.

Most of this obligatory supplemental information is taken over from DSD/DPD and therefore usually only applies in the EU. For any supplemental hazard statements included in CLP, a new "EU" codification system is introduced, to distinguish them from the hazard statements originating from the UN GHS. These are easily recognizable with a EUH code.

24 As it is obligatory to place this information alongside the label elements required by 25 CLP Article 17(a) to (g), these supplemental label elements need to be considered 26 carefully as to the location and the space they need when preparing a CLP label for a 27 substance or mixture. Obligatory supplemental information, when applied, 28 should be easy to identify and to read. Naturally, it should take precedence 29 over any non-obligatory supplemental information if space on the label is 30 limited. However in some cases suppliers may find they need to include certain 31 elements on the label which are not legally obligatory, but are necessary for the 32 handling and use of the product – such as basic instructions for use. In this case, the 33 need for such information should also be taken into account when deciding how to 34 lay out the label.

35 In this connection is should be mentioned that CLP suggests, but does not explicitly 36 require that the section for supplemental label information should be one single 37 location on the label – a supplier may also choose to place the supplemental 38 information in several locations, taking into account the requirements of CLP Article 39 25. Examples are i.a. provided by the labels 6.3 and 6.5 in section 6 of this 40 document. Similarly, CLP suggests, but does not explicitly require that the section for 41 supplemental label information be marked or visibly separated from the labelling 42 elements according to CLP Article 17(a) to (g), e.g. by placing it in another section of 43 the label, by putting it in a text box, by colour or by different letter size.

Undoubtedly visible separation will support the identification of the labelling elements which come from the UN GHS. However, and on a case-by-case basis, it may not be advisable to make a visible differentiation between the CLP elements and obligatory supplemental labelling information that is requested by other legislation, namely where the latter supports the safe handling and use of a substance or mixture according to harmonised Community rules, e.g. in the case of plant protection products, see example label 6.6 below.

1 Similarly, where additional EUH statements express a similar warning as contained in 2 the hazard statements which reflect a classification, it is even advisable to group both 3 statements together on the label so that they reinforce each other, e.g. for lithium (EC 4 No 231-102-5) which is classified as water-reactive category 1, EUH014 (Reacts 5 violently with water.") is very similar to H260 ("In contact with water releases flammable gases which may ignite spontaneously."), see example label 6.4 below. 6 7 In relation to readability, obligatory labelling information required by other Community 8 legislation, e.g. the authorisation number required by Regulation (EC) No 1107/2009⁸

9 or the listing of specified constituents as required by Regulation (EC) No 648/2004⁹,
 10 should not be treated differently from other obligatory labelling information required
 11 by CLP itself: Similar to the latter, it should be easy to identify and to read and take
 12 precedence on the CLP label over any other non-obligatory supplemental
 13 information.

14 An overview of the obligatory supplemental label elements to be included in the 15 section for supplemental information on the label is provided in Table 5:

⁸ Regulation (EC) No 1107/2009 of the European Parliament and of the Council of 21 October 2009 concerning the placing of plant protection products on the market repeals Council Directives 79/117/EEC and 91/414/EEC with effect from 14 June 2011. However Article 80 of Regulation (EC) No 1107/2009 specifies that directive 91/414/EEC shall continue to apply with respect to active substances included in Annex I to that Directive for certain transitional periods.

⁹ Regulation (EC) No 648/2004 of the European Parliament and of the Council of 31 March 2004 on detergents.

Table 5: Obligatory supplemental labelling information pursuant to CLP Articles 25 and 32

Legal Reference	Type and Applicability	Code	Content / Phrasing	
CLP Article 25(1) and Annex II, Part 1, section 1.1	substances and mixtures. They need specified in Annex II when a substar	to be assigned nce or mixture ha CLP. For son		
		EUH006	Explosive when dry Explosive with or without contact with air	
		EUH014	Reacts violently with water	
		EUH018	In use, may form flammable/ explosive vapour-air mixture	
		EUH019	May form explosive peroxides	
		EUH044	Risk of explosion if heated under confinement	
CLP Article 25(1) and Annex II, Part 1, section 1.2	II, Part mixtures. They need to be assigned in accordance with the conditions specified		with the conditions specified in xture has already been classified ome substances with harmonised	
		EUH029	Contact with water liberates toxic gas	
		EUH031	Contact with acids liberates toxic gas	
		EUH032	Contact with acids liberates very toxic gas	
		EUH066	Repeated exposure may cause skin dryness or cracking	
		EUH070	Toxic by eye contact	
		EUH071	Corrosive to the respiratory tract	
CLP Article 25(6) and Annex II, Part 2	Supplemental statements for certain accordance with the conditions specif			
	1. Mixtures containing lead	EUH201	Contains lead. Should not be used on surfaces liable to be chewed or sucked by children	
	 for packaging content less than 125 ml 	EUH201A	Warning! Contains lead.	
	2. Mixtures containing cyanoacrylates	EUH202	Cyanoacrylate. Danger. Bonds skin and eyes in seconds. Keep out of the reach of children.	
	3. Cement and cement mixtures	EUH203	Contains chromium (VI). May produce an allergic reaction	
	4. Mixtures containing isocyanates	EUH204	Contains isocyanates. May produce an allergic reaction	
	5. Mixtures containing epoxy constituents with an average molecular weight ≤ 700	EUH205	Contains epoxy constituents. May produce an allergic reaction	

Legal Reference	Type and Applicability	Code	Content / Phrasing
	6. Mixtures sold to the general public which contain active chlorine	EUH206	Warning! Do not use together with other products. May release dangerous gases (chlorine)
	7. Mixtures containing cadmium (alloys) and intended to be used for brazing or soldering	EUH207	Warning! Contains cadmium. Dangerous fumes are formed during use. See information supplied by the manufacturer. Comply with the safety instructions.
	8. Mixtures not classified as sensitising but containing at least one sensitising substance	EUH208	Contains (name of sensitising substance). May produce an allergic reaction
	9. Liquid mixtures containing halogenated hydrocarbons	EUH209 EUH209A	Can become highly flammable in use or Can become flammable in use
	10. Mixtures not intended for the general public	EUH210	Safety Data Sheet available on request
	11. Aerosols		Aerosols are also subject to the labelling provisions of Directive 75/324/EEC
CLP Article 25(5) and Annex I, Part 5	Signal word, hazard statement and precautionary statements for a hazard class included in Part 5 of Annex I (see the pertinent bullet point in the text preceding this	EUH059 P273	<i>Danger</i> (signal word) <i>Hazardous to the ozone layer</i> <i>Avoid release to the</i> <i>environment</i>
	table)	P501	Dispose of contents/container to (specification of the site of disposal or of the applicable legislation, see section 7 below)
Annex IV	 Substances and mixtures assigned the precautionary statements P320 - Specific treatment is urgent (see on this label). P321 - Specific treatment (see on this label). P322 - Specific measures (see on this label). 		Supplemental first aid instruction (e.g. administration of an antidote) referred to in the brackets of the precautionary statements
Annex I, section 3.1.3.6.2.2.	Mixture containing ingredient(s) of unknown acute toxicity at a concentration at 1% or greater		x percent of the mixture consists of component(s) of unknown toxicity (also for Safety Data Sheet)
Annex I, section 4.1.3.6.1	Mixture where no useable information on the acute and/or long-term aquatic hazard is available for one or more of the relevant components		Contains x percent of components with unknown hazards to the aquatic environment (also for Safety Data Sheet)
Label elements resulting from Directive 91/414/EEC or	Supplemental statements relating to plant protection products	EUH401	To avoid risks to human health and the environment, comply with the instructions for use
Regulation (EC) No 1107/2009 on plant		SP1, SPe3 et al.	obligatory statements required by the applicable Communit legislation on plant protection

(draft)

Legal Reference	Type and Applicability	Code	Content / Phrasing
protection products, pursuant to CLP Article 25(2) and 32(6)			products
Label elements resulting from other Community acts pursuant to Article 32(6)	 Examples: Regulation (EC) No 1907/2006 (REACH) Regulation (EC) No 648/2004 (detergents) 		 authorisation number listing of specified constituents such as anionic surfactants, oxygen bleaching agents, enzymes, disinfectants, optical brighteners and perfumes
	 Directive 75/324/EEC (aerosol dispensers) Directive 2004/42/EC (VOC) 		 flammability labelling content of volatile organic compounds

<u>Non-obligatory</u> supplemental labelling information, the content of which is up to the
 discretion of the supplier, is not part of the labelling requirements under CLP. It can
 include, for example, specific product information or particular instructions for use.

4 This non-obligatory supplemental information may also be placed alongside the label 5 elements required in CLP Article 17(a) to (g) and the obligatory supplemental 6 information, when applied. However, it should not distract from nor contradict to these obligatory label elements and should also provide further details, see CLP 7 8 Article 25(3). In addition, any non-obligatory supplemental information, either included on the label or on the packaging, should be consistent with the classification 9 10 of the substance or mixture, see CLP Article 25(4). This means that statements like 'ecological', statements suggesting that the 11 'non-polluting' or 'non-toxic'. 12 substance/mixture is not hazardous or statements that are incompatible with the 13 assigned classification should not appear on the label or packaging of a classified 14 substance or mixture.

1 5. GUIDANCE ON PARTICULAR ASPECTS OF CLP 2 HAZARD LABELLING

3 **5.1 Further aspects to consider for the CLP hazard label**

4 To enable the supplier to design labels in compliance with CLP while at the same 5 time allowing for as much freedom in arranging labels as possible, further labelling 6 aspects should be considered:

- Label size: section 1.2 of Annex I to CLP defines the label size, setting out
 minimum dimensions for the label, with the pictogram size being linked to these
 minimum dimensions. Nevertheless, the label should be large enough to contain
 all the label elements defined by CLP while remaining legible. As a result, the
 label may need to be larger than the minimum area specified;
- 12 Specific labelling rules: they refer to specific labelling and packaging situations, 13 e.q. where a substance or mixture is contained in awkwardly shaped or small 14 packaging, see CLP Article 29. Other rules, i.e. the rules set out in CLP Article 15 33, refer to multiple layers of packaging and/or where a substance or mixture is 16 subject to the labelling provisions of the CLP Regulation and to the labelling 17 provision in accordance with the rules on the transport of dangerous goods according to the United Nations Model Regulations on the Transport of 18 19 Dangerous Goods (the so-called "Orange Book") which are implemented in the 20 EU through international modal agreements and Directive 2008/68/EC. 21 hereinafter referred to as the rules on the transport of dangerous goods. The 22 person(s) responsible for compiling a CLP label needs to consider all of these 23 rules before making a final decision on the label of his substance or mixture;
- 24 Selection of precautionary statements: while the rules on the use of signal • 25 words, hazard pictograms and hazard statements are quite unambiguous in CLP. 26 see above, the selection of the most appropriate set of precautionary 27 statements for the label is largely at the discretion and ingenuity of the supplier. 28 To facilitate this selection, guidance on the selection of precautionary statements 29 is provided in section 7 of this document. The guidance builds upon the generic 30 provisions set out in CLP Article 22 and 28 as well as the basic instructions 31 provided in the columns containing the conditions for use in tables 6.1-6.5 of 32 Annex IV to CLP. It takes into account i.a. the intended uses and the physical 33 properties of the substance or mixture.

34 **5.2 Size of the label and of the label elements**

As outlined in section 3.4 above, the number of label elements required for a CLPcompliant label for a given substance or mixture can be higher compared to the DSD/DPD regime for various reasons. Further label elements may have to be added, requiring additional labelling space and possibly also another labelling arrangement compared to the DSD/DPD label.

- 40 The CLP Regulation defines minimum dimensions on the size of the label and some 41 of its elements. They are detailed in section 1.2 of Annex I to CLP, see also Table 6
- 42 below. The minimum dimensions are taken over from DSD.

Capacity of the package	Dimensions of the label (in millimetres)	Dimensions of the pictogram (in millimetres)
≤ 3 litres	If possible, at least 52 x 74	Not smaller than 10 x 10 If possible, at least 16 x 16
> 3 litres but ≤ 50 litres	At least 74 x 105	At least 23 x 23
> 50 litres but ≤ 500 litres	At least 105 x 148	At least 32 x 32
> 500 litres	At least 148 x 210	At least 46 x 46

4				.		_
1	Table 6:	Minimum	dimensions	of labels an	d pictograms under CL	P
1	Tuble V.	IVIII IIII IIIIIII IIIIIII		or labelo an	a plotogramo anaci ol	-

2

3 In general, CLP requires that the label elements as referred to in CLP Article 17(1) be 4 of such size and spacing as to be easily read (see also section 3.1 of this document).

5 The exact **size of the letters** of the signal words, hazard statements, precautionary 6 statements and any supplemental information is not further defined in the legal text, 7 i.e. it is left to the discretion of the supplier. This means that a stakeholder may 8 decide himself whether he wants to increase the letter size with the overall volume of 9 the packaging and dimensions of the label, or to fix it more or less for all volumes and 10 labels.

Similarly, a supplier may decide whether he prefers to have larger letter sizes for certain label elements while others are presented in smaller letters. Actually some companies choose to provide the signal word "Danger" or "Warning" in larger letters on the label than the hazard and precautionary statements. Various companies also choose to generally present the obligatory label elements in larger letters than the non-obligatory labeling information. Both scenarios are in principle compatible with the CLP legal text as far as the obligatory information on the label can be easily read.

18 Actually some stakeholders recommend to use a minimum letter size of 1,8 mm, in 19 order to warrant the legibility of the text. However, this can be understood as 20 recommendation only, but not as legal requirement which is fixed in the CLP 21 Regulation.

In relation to the hazard pictograms, CLP links the **size of the pictograms** to the minimum dimensions of the label: each hazard pictogram¹⁰ should cover at least one fifteenth of the surface area of the label dedicated to the information required by CLP Article 17 (obligatory labelling information), but the minimum area shall not be less than 1 cm², see section 1.2.1.2 of Annex I to CLP. The idea behind this is that the label size and the size of the pictograms should remain proportional to the size of the packaging.

In principle, a label complying with the minimum dimensions set out above should be large enough to contain all the label elements defined in CLP Article 17 while remaining legible. Precedence should be given to the obligatory label elements, i.e. to those elements defined in Article 17(a) to (g) and any obligatory supplemental information required by CLP and other Community/EU legislation. If a supplier chooses to add non-obligatory supplemental label elements, legibility may be

¹⁰ The size of the pictogram relates here to the dimensions of the pictogram itself, and not to the size of the virtual square where the pictogram is in.

warranted only where a small amount of such information is added. For larger amounts of non-obligatory information the supplier should consider to limit it or to increase the size of the label and possibly also the size of the different obligatory label elements. This should serve the purpose of facilitating the identification and maintaining the legibility of the obligatory label elements as referred to in CLP Articles 17 and 25.

7 It should be noted that a pictogram covering one fifteenth of the minimum dimensions 8 as defined in Table 1.3 of Annex I to CLP is considered to be legible. Its size has to 9 be increased in all cases where it occupies less than 1/15th of the surface area of the 10 label dedicated to the information required by CLP Article 17 (obligatory labelling 11 information). However, where a supplier chooses to use a label that is larger than the 12 minimum dimensions for a certain capacity of the package, it is not necessary for the 13 pictogram to be increased as well, provided it covers one fifteenth of the relevant minimum dimensions, i.e. for a container of a capacity > 50 litres, but \leq 500 litres, the 14 15 minimum size of a pictogram must be 32 mm x 32 mm, which is 1/15th of the 16 minimum dimensions (105 mm x 148mm) set out in Table 1.3 of Annex I to CLP. Any additional area gained by increasing the size of the label can be used for further 17 18 information which is considered important by the supplier. However, this should be 19 weighed against the requirement of CLP Article 25(3), namely that non-obligatory 20 supplemental information should not make it more difficult to identify the obligatory 21 CLP label elements.

22 **5.3 Exemptions from the labelling and packaging requirements**

23 Not all packages will allow displaying the necessary labelling information on the label 24 or the packaging in line with the requirements of CLP Article 31. CLP Article 29 and 25 section 1.5.1 of Annex I recognise such situations in providing derogations for 26 packaging which is so small or in such a shape or form or that it is impossible to meet 27 the requirements of CLP Article 31. While most of these provisions were brought over 28 from DSD/DPD ("small and awkward packaging"), some new ones were introduced 29 through CLP, out of the necessity for the legal framework to keep up with the 30 developments in packaging technology, and to allow suppliers some flexibility when 31 dealing with packaging that is difficult to label.

32

5.3.1 Use of fold-out labels, tie-on tags and outer packaging

34 The packaging of a substance or mixture can be so small or in such a shape or form 35 that it is impossible to display the label elements in line with the requirements of CLP 36 Article 31. This could either be because more than one language needs to be 37 included on the label in the Member State where the chemical is being placed on the 38 market, or simply because the packaging is too small or difficult to label because of 39 its form/shape so that the full range of labelling elements even in a single language 40 cannot be displayed (in accordance with CLP Article 31). In particular, it may be 41 impossible for the label to be read horizontally when the package is set down 42 normally or the label elements are of insufficient size and spacing as to be easily 43 read.

In this situation the label elements defined under CLP Article 17 may be providedeither on

- fold-out labels; or
- tie-on tags; or on

• outer packaging.

Where one of these alternatives is used, the part of the label which is attached to the packaging or, in relation to the last bullet, the label on any inner packaging shall contain at least the hazard pictogram(s), the product identifier referred to in CLP Article 18 and the name and telephone number of the supplier of the substance or mixture, while the signal word, the hazard and precautionary statements as well as the supplemental label information may be omitted, see section 1.5.1.2. of Annex I to CLP.

9 It should be noted that these alternatives may not be used where a label becomes 10 unreadable because the supplier has chosen to add more languages on a label than 11 are required in the Member State where the substance or mixture is placed on the 12 market. In such cases the additional languages should be omitted from the label and 13 a separate label should be prepared for the other Member State(s) where these are 14 required.

Fold-out labels can be an option and are in fact commonly used where the amount of supplemental information required by other legislation means that the total label would be too large for the inner packaging. Compared to tie-on tags, the use of foldout labels will probably be the preferred option as this will offer most space for the label elements in many cases.

- In general, when a supplier recognizes the need to use *fold-out labels* or *tie-on tags*,
 he should consider the following aspects:
- <u>General requirements</u>: Generally, a tie-on tag or fold-out label should meet the same performance standards as a normal label i.e. the contents should be indelible, easy to read and stand out from the background. As far as reasonably practical, the size of the fold-out label or tie-on tag should be the same size as the equivalent normal label. Similarly, the size of the pictograms should be the same as the pictograms on the equivalent, normal label.
- <u>Attachment:</u> The fold-out label or tie-on tag should be securely attached to the packaging. This means that the label is likely to remain attached to the packaging during reasonably expected handling of the package. If part of a fold-out label is designed to be removed from the inner packaging as a standalone booklet, then the CLP information should remain on the packaging. CLP requires that this is at least the hazard pictograms, the product identifier and the name and telephone number of the supplier of the substance or mixture.
- <u>Material</u>: There is no specific standard for label materials and performance. Where labels also contain dangerous goods information and the package is intended to be transported, the performance as required by the code which is relevant to the specific mode of transport has to be applied, e.g. by the IMDG code for the maritime mode of transport.

40 Fold-out labels are often made of normal, uncoated paper. Where the contents of a 41 package may attack the printing, it is possible to coat the label with a protective 42 coating. Current standard practice is that normally only the outer page is coated. In 43 this situation, the label designer should include the information required by CLP 44 Article 17 (obligatory labelling information) on the outer page, with the non-obligatory 45 information (non-obligatory supplemental information) on the inner pages. Where this 46 is not possible because of space constraints on the outer, coated page, he should at 47 least include the hazard pictograms, the product identifier(s) referred to in CLP Article 48 18 and the name and telephone number of the supplier of the substance or mixture 49 on the outer page, with the remaining information on the inner pages.

(draft)

In this connection, it should be emphasized that pursuant to Recital 47 of the CLP Regulation, Directive 91/414/EEC on plant protection products and Directive 98/8/EC on biocidal products "should remain fully applicable to any product within their scope." Further to this, and in relation to plant protection products, the new Regulation (EC) No 1107/2009 provides in its Article 80(6) that "products labelled in accordance with Article 16 of Directive 91/414/EEC may continue to be placed on the market until 14 June 2015."

7 An example of the labeling requirements of Directive 91/414/EEC is provided by Article 16(2) 8 of Directive 91/414/EEC: it provides that Member States may permit the requirements in 9 Article 16(1) (I), (m) and (n) to be indicated on a separate leaflet accompanying the package if 10 the space available on the package is too small. This suggests considering the inner pages of 11 a fold-out label as such kind of leaflet that could incorporate the mentioned items. It should be 12 noted, however, that a (fold-out) leaflet may not contain items such as safety precautions for 13 the protection of humans, animals or the environment, in the form of standard phrases 14 selected as appropriate from those given in Annex V of the Directive, see item (h) of the same 15 paragraph, or the type of action of the plant protection product (e.g. insecticide, growth 16 regulator, weed killer, see item (i) of that paragraph; they should remain on the label which is 17 displayed on the packaging or on the outer page of the fold-out label. See example label 6.6 18 below.

19 To use the space on the **outer packaging** for the label elements defined under CLP 20 Article 17 can be an option where it contains many units of packages that are too 21 small or difficult to label because of their form/shape. In such cases the requirements 22 that normally apply to labels, see CLP Articles 31 and 32, will also apply to the label 23 area on the outer packaging. The label on any inner or intermediate packaging shall 24 then contain at least the hazard pictograms, the product identifier(s) referred to in 25 CLP Article 18 and the name and telephone number of the supplier of the substance 26 or mixture, see section 1.5.1.2. of Annex I to CLP

When the outer packaging option is used, a distributor or retailer has to take care that all the label elements required by CLP are available when he decides to sell the units individually afterwards. In this case it may be worthwhile to check whether he is allowed to apply the small packaging exemptions referred to in CLP Article 29(2), see section 5.3.2 below.

32

33 **5.3.2 Omission of certain label elements**

- 34 If the full labelling information cannot be provided in any of the ways presented in the 35 preceding section, namely where
- the packaging is so small or in such (awkward) shape or form that it is impossible
 to meet the requirements of Article 31 for a label in the languages of the Member
 State where the substance or mixture is placed on the market, and where
- the labelling information can neither be provided in fold-out labels, on tie-on tags
 or on an outer packaging, e.g. in case of soluble packaging,
- 41 CLP Article 29(2) allows the supplier to **reduce** the information on the label that 42 would normally be required according to CLP Article 17.
- 43

44 5.3.2.1 Exemptions where the contents do not exceed 125 ml

The first type of exemptions relates to packages where the contents do not exceed 125 ml. The label elements related to the hazard classes and categories listed in column 2 of Table 7 below may be omitted from the label where the substance or mixture is classified for these hazard classes or categories. However, where the substance or mixture is classified under further hazard classes not listed, the label

1 elements related to these other hazard classes still need to be included.

- 2 3
- Table 7: Labelling exemptions for packages of a capacity of 125 ml or less

Hererd eleccification	Allowed emissions
Hazard classification of the substance or mixture	Allowed omissions according to section 1.5.2 of Annex I to CLP
Oxidising gases cat. 1 Gases under pressure Flammable liquids cat. 2 or 3 Flammable solids cat. 1 or 2 Self-reactive substances and mixtures, types CDEF Self-heating substances and mixtures, cat. 2 Substances and mixtures which, in contact with water, emit flammable gases, cat. 1, 2 or 3 Oxidising liquids cat. 2 or 3 Oxidising solids cat. 2 or 3 Oxidising solids cat. 2 or 3 Organic peroxides, types CDEF Acute toxicity cat. 4 (no supply to general public) Skin irritants cat. 2 Eye irritants cat. 2 STOT-SE 2 or 3 (no supply to general public) STOT-RE 2 (no supply to general public) Aquatic acute cat. 1 Aquatic chronic cat. 1 or 2	hazard and precautionary statements for the hazard classes mentioned in column 1 <u>comment:</u> the hazard pictograms are required for the denoted hazards
Flammable gases cat.2 Effects on or via lactation Aquatic chronic cat. 3 or 4	precautionary statements linked to the hazard classes in column 1 <u>comment:</u> the hazard statements should be provided as no hazard pictogram is required for the denoted hazards
Corrosive to metals	hazard pictogram, hazard and precautionary statements for this hazard class

4

5

6 **5.3.2.2 Exemptions for specific cases**

Further to the volume-related small and awkward packaging exemptions set out
above, CLP specifies cases where similar exemptions from the labelling and
packaging requirements apply:

Small packages of aerosols: similar to DSD, CLP stipulates that the exemptions for labelling of small packages of aerosols as flammable laid down in the Annex to Directive 75/324/EEC¹¹ shall apply fully to aerosol dispensers.

13 <u>Soluble packaging</u>: another exemption defined under CLP applies to soluble

¹¹ Council Directive 75/324/EEC of 20 May 1975 on the approximation of the laws of the Member States relating to aerosol dispensers, as amended by Commission Directive 94/1/EC and Commission Directive 2008/47/EC

1 packaging which does not exceed a volume of 25 ml: all CLP label elements required 2 by CLP Article 17 may be omitted from soluble packaging provided it is intended for 3 single use and it is contained within outer packaging that contains all label elements 4 required under CLP. The exemption applies in cases where the substance or mixture 5 contained is classified exclusively for one or more of the hazards listed in column 2 of
 Table 7 above. However, this exemption does not apply to substances and mixtures
 6 7 within the scope of Regulation (EC) No 1107/2009 (plant protection products) or 8 Directive 98/8/EC (biocidal products).

9 Unpackaged hazardous substances and mixtures supplied to the general public: a provision which is new under CLP relates to unpackaged hazardous substances and 10 11 mixtures supplied to the general public: labelling information about unpackaged 12 chemicals sold to the general public which are mentioned in Part 5 of Annex II to CLP 13 should be made available as (paper) copy, e.g. on an invoice or bill, see CLP Article 14 29(3). When the purchase of such substances or mixtures occurs at a different point 15 in time than their delivery to the customer, one might also consider to provide a 16 leaflet which contains the relevant labelling information when delivering the 17 substance or mixture, or to send the information by email. However, this concerns 18 currently only a few substances: ready mix cement and concrete in the wet state.

Environmental labelling: Similar to DSD, CLP includes the possibility to introduce exemptions from environmental labelling for certain mixtures classified as hazardous to the environment where it can be demonstrated that there would be a reduction in the environmental impact, see CLP Article 29(4). However, no such exemptions have to date been agreed; rather, any exemptions will need to be determined in accordance with the 'comitology' procedure referred to in CLP Articles 53 and 54 and would be defined in Part II of Annex II to CLP.

26 **5.4 Interaction between the CLP and the transport labelling rules**

The interaction between the supply & use labelling and the transport labelling was previously regulated in Article 24(6) of Directive 92/32/EEC (i.e. in the 7th ATP to DSD) for substances and in Article 11(6) of DPD for mixtures. In the CLP Regulation, it is Article 33 which sets out specific rules for situations where the packaging of hazardous substances and mixtures is required to meet also labelling provisions in accordance with the rules on the transport of dangerous goods.

The transport labelling provisions are set out in the United Nations Model Regulations on the Transport of Dangerous Goods (the so-called "Orange Book") and are implemented in the EU through international modal agreements and Directive 2008/68/EC for the inland transport of dangerous goods (road and rail). Transport labelling as referred to in CLP Article 33 includes all labels and marks required by e.g. Directive 2008/68/EC, e.g. the mark for environmentally hazardous substances, elevated temperature marks or limited/exempted quantities marks.

40 A basic principle of CLP is not to override any labelling required by the transport rules 41 while maintaining essential hazard information on the relevant layer(s) of packaging.

42 **CLP** labelling is normally required on every inner and intermediate layer of the 43 packaging of a substance or mixture; it *may* also appear on an outer 44 packaging. Transport labelling will have to appear on the outer packaging of 45 hazardous substances and mixtures if these are "dangerous goods" according 46 to the rules on the transport of dangerous goods. Single packages need to 47 carry both the CLP label elements and the transport labelling, except for the

1 CLP hazard pictograms where these are already covered by (an) equivalent 2 transport pictogram(s) reflecting the same hazard.

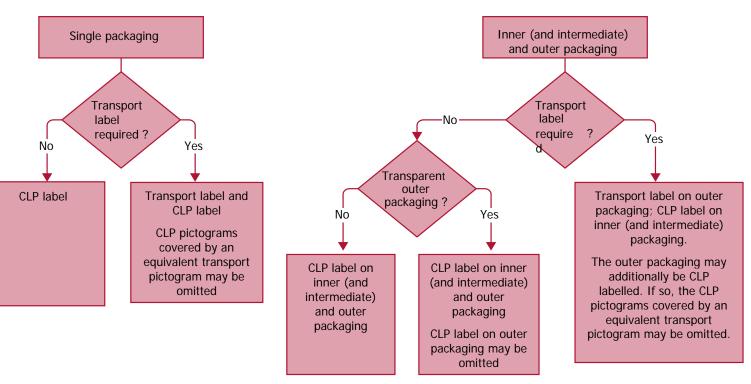
3 While CLP may not require outer packaging to carry the CLP label elements where 4 it already carries the corresponding transport labelling, a supplier may choose to 5 apply to the outer packaging those CLP label elements that are on the inner or 6 intermediate packaging. This option may need to be considered where the 7 substance or mixture is classified for a hazard that is not covered by the rules on the 8 transport of dangerous goods – e.g. for skin and eye irritation, CMR or for the aquatic 9 chronic hazards category 3 and 4. However, inclusion of CLP labelling on the outer 10 packaging is not obligatory in this case.

Where the outer packaging does not need to carry labelling in accordance with the rules on the transport of dangerous goods, both the inner/ intermediate and the outer packaging should display the CLP labelling elements. Where the outer packaging is transparent, all CLP label elements can be omitted from it where the CLP label beneath the transparent layer is clearly visible.

16 The assumption underlying the provisions of CLP Article 33(2) is that only one 17 substance or mixture is contained in single or combined outer packaging. Therefore, 18 in cases where the rules on the transport of dangerous goods do not apply and 19 where more than one substance or mixture with different hazard classifications are 20 packed together in the same outer packaging then the rules of CLP Article 33(2) 21 should be applied with care: where the outer packaging carries different labels which 22 relate to different packaged substances or mixtures, then the whole set of individual 23 labels on the outer packaging may not provide coherent hazard information and 24 safety advice, e.g. in case one substance is hazardous to the aquatic environment, 25 the other is a carcinogen, the third one is flammable and the last one is a non-26 hazardous mixture.

The legal requirements of CLP Article 33 and the decisions involved when dealing with them are depicted in the following figure:

29



- 1 2 **Figure 3**: Decision flowchart for the application of CLP and transport labelling for single packaging (left) and combination packaging (right)

1 6. EXAMPLE LABELS

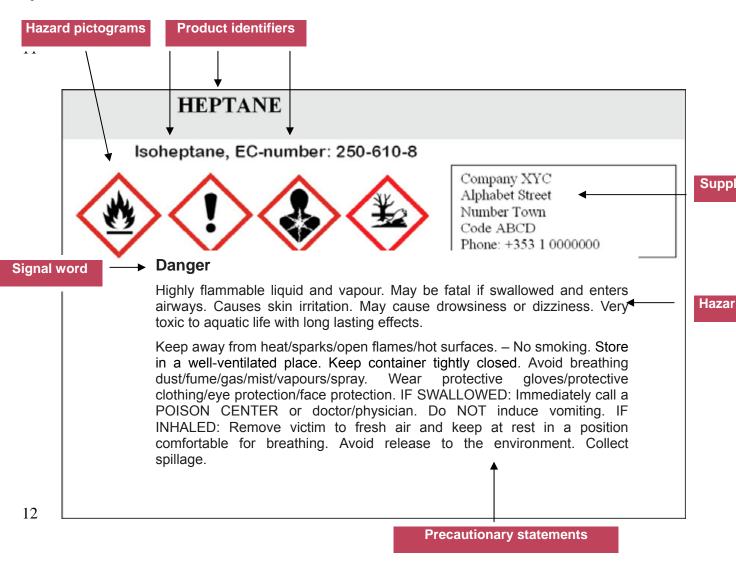
A number of examples are provided below to illustrate different and challenging situations that may be encountered when designing labels. Various aspects treated in this guidance document are incorporated; they will be discussed in the light of the overall label lay-out. Nevertheless, the example labels provided below should only illustrate the possible lay-out, but do not necessarily reflect the actual size.

7 Please note that each of the example labels below is only an example of how to 8 arrange a label for a given situation. The arrangements shown are not 9 exhaustive or mandatory in all aspects, and the sizes shown are not 10 necessarily the actual sizes.

6.1 Single language label of a substance for supply & use

Example label 6.1 represents a simple supply & use label which takes into account the CLP label elements only. It shows the CLP terminology and pictograms in accordance with CLP Article 17(a) and (c) to (g), i.e. the product identifiers, the identity of the supplier, the signal word, the hazard pictograms, the hazard and the precautionary statements. As the substance is not supplied to the general public, the nominal quantity of the substance contained in the package is not required on the label.

9



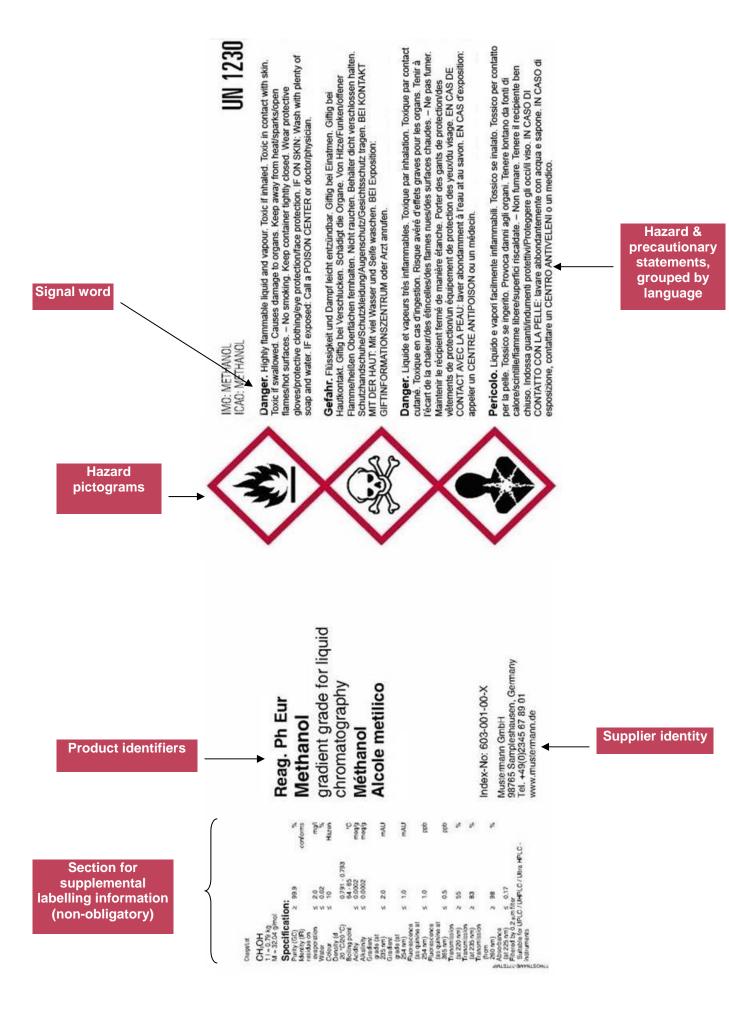
6.2 Multi-language label of a substance for supply & use containing non obligatory supplemental information

3 Example label 6.2 represents a multi-language label for supply & use. It shows the 4 CLP terminology and pictograms in accordance with CLP Article 17(a) and (c) to (h), 5 i.e. the product identifier, the identity of the supplier, the hazard pictograms, the 6 signal words and the hazard and precautionary statements in four languages. As the 7 substance is not supplied to the general public, the nominal quantity of the substance 8 contained in the package is not required on the label. In accordance with CLP Article 9 32(3), the hazard and precautionary statements of one language are located together 10 on the label. A section for supplemental labelling is included on the left-hand side of 11 the label including non-obligatory supplemental labelling information.

As to the lay-out, label 6.2 is an authentic label designed for a 2.5 litre bottle. Its real dimensions are significantly larger than depicted here. Based on the minimum dimensions for the label area, which would be at least 52 mm x 74 mm, the size of each of the pictograms is supposed to be at least 257 mm², corresponding to a side length of 16 mm, on the real label, see section 4.3 above.

17 In case the section for supplemental labelling is increased, e.g. in order to 18 incorporate information related to the use of the substance, the overall area of the 19 label and the size of its elements may have to be increased as well, in particular the 20 letter size of the signal words, hazard and precautionary statements. This would 21 warrant the legibility of the obligatory label information which appears in multiple 22 languages. In this case it may be wise also to increase the size of the pictograms.

23



1 6.3 Single language label of a mixture for supply & use

containing both obligatory and non-obligatory supplemental information

4 Example label 6.3 illustrates the use of a supply & use label for a typical consumer 5 product (detergent). All obligatory labelling information is shown, i.e. the product 6 identifiers (trade name and designation of the mixture; one of them would have been 7 sufficient), the identity of the supplier, the signal word, the hazard and precautionary 8 statements and the obligatory supplemental information, in accordance with 9 Regulation (EC) No 648/2004 on detergents. As the product is supplied to the 10 general public, its nominal quantity is also provided on the label. Beyond the obligatory supplemental information, also some non-obligatory supplemental 11 12 information is shown.

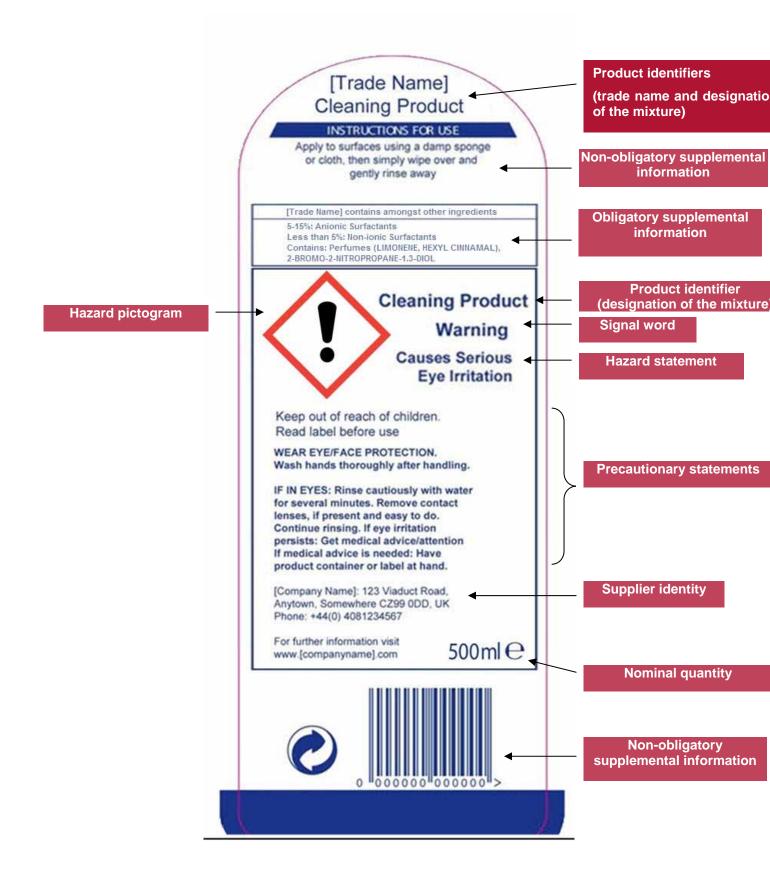
13 This label clearly separates the obligatory information as required by CLP and other 14 Community legislation from the non-obligatory elements. The former is delineated by 15 two text boxes, with the "CLP box" being located in a central, eye-catching position 16 on the label. The non-obligatory label elements can be found in the lower part of the 17 label and in the upper part, under the headline "instructions for use".

Example label 6.3 as depicted here has a real size of 165 mm x 72 mm; the area of the label that contains the obligatory label elements, i.e. the two boxes and the nominal quantity, is about 98 mm x 72 mm. In principle the area covered by the text block "For further information visit ..." must be subtracted; on the other hand, approximately the same area covered by the line "trade name" should be added, so there is overall no change.

Example label 6.3 is larger than the minimum dimensions required by CLP, which is at least 52 mm x 74 mm for a 500 ml bottle. The pictogram is larger than the requested minimum area of 1 cm².

The label shown is primarily drafted for inner packaging. If the chemical is contained in combination (= inner + outer) packaging, the same information should be shown on the outer packaging, unless the information on the inner packaging can be seen through the outer packaging.

- 31
- 32
- 33

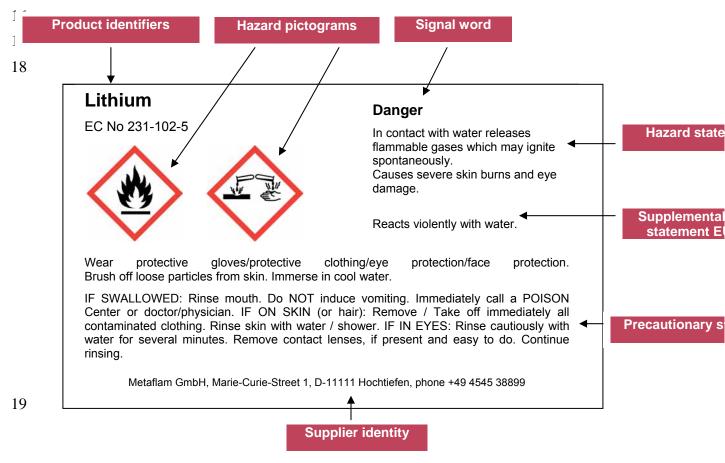


6.4 Single language label of a substance for supply & use containing supplemental hazard statements

Example label 6.4 illustrates a supply & use label for the substance lithium (EC No
231-102-5). A harmonised classification (water-reactive cat. 1, skin corrosive cat. 1B)
as well as the supplemental hazard statement EUH014 are assigned through Annex
VI to CLP, while additional hazards are not found. The substance is not intended to
be used by the general public; it is supplied in a 1 I package.

All obligatory labelling information is shown, i.e. the product identifiers, the identity of the supplier, the hazard pictograms, the signal word, the hazard and precautionary statements and the supplemental hazard statement EUH014, in accordance with Table 3.1 of Annex VI to CLP. Although EUH014 is supposed to be supplemental information only, it is placed by intention closely to the regular CLP hazard statements, so as to reinforce the message provided by the latter.

- 14
- 15



(draft)

6.5 Multi-language label of a mixture for supply & use containing both 1 2 obligatory and non-obligatory supplemental information

3 Example label 6.5 represents the draft of a multi-language supply & use label for a 4 typical consumer chemical (decorative paint). All obligatory labelling information is 5 shown, i.e. the product identifiers, the identity of the supplier, the signal word, the hazard and precautionary statements and the obligatory supplemental information, in 6 7 particular information in accordance with the VOC Directive 2004/42/EC on the 8 limitation of emissions of volatile organic compounds (VOC) due to the use of organic 9 solvents in certain paints and varnishes and vehicle refinishing products. In 10 accordance with CLP Article 32(3), the hazard and precautionary statements of one language are located together on the label. As the chemical is supplied to the general 11 12 public, its nominal quantity is also provided on the label. Beyond the obligatory label 13 elements, non-obligatory supplemental information is shown.

14 This example label separates the CLP label elements from the supplemental 15 information by locating the former in a more eve-catching position on the label while 16 the supplemental information can be found rather in the margins of the label. The 17 texts reflecting the supplemental information appear in slightly smaller letters than the 18 CLP label elements.

19 The size of this label is intended to be 125 mm x 150 mm when applied on the 20 packaging. This means that the real label will be considerably larger than the 21 minimum dimensions for a 1 I package (52 x 74 mm) required under CLP. The pictogram size of 19 x 19 mm is less than 1/15th of the whole label, but greater than 22 23 1/15th of the minimum dimensions.

1 **Product identifier** 2 Hazard pictogram 3 PAINTCO SATIN WHITE Product code 123456 Non-obligatory informa Krasvaste zijdeglanslack - Couche de finition satinée résistante à l'abrasion - Scratch-resistant satin finish NL: X Straat, 9999 YZ Stad, Tel. 0111-222333 Supplie www.paintco.nl Rue Y. B-9999 Ville, Tel. 045-678910 BE: www.paintco.be Z Street, Town XY99 9YZ, Tel. 012-345678 GB: www.paintco.co.uk Waarschuwing. Ontviambare vioeistof en damp. Buiten het bereik van kinderen houden. Verwijderd houden van warmte/vonken/open vuur/hete oppervlaken. - Niet roken. Inhoud/verpakking afvoeren naar een inzamelpunt bij de gemeente. Bij het inwinnen van medisch advies, de verpakking of het etiket Signal w and pre ter beschikking houden. stateme Attention. Liquide et vapeurs inflammables. lang Tenir hors de portée des enfants. Tenir à l'écart de la chaleur/des étincelles/des filammes nues/des surfaces chaudes. - Ne pas fumer. Éliminer le contenuirécipient au point de collecte municipale. En cas de consultation d'un médecin, garder à disposition le récipient ou l'étiquette Warning. Flammable liquid and vapour. Keep out of reach of children. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Dispose of contents/container at the municipal collection point. If medical advice is needed, have product container or label at hand. EU grenswaarde voor dit product (cat A/d): 300 g/l. Dit product bevat maximaal 300 g/I VOS Valeur limite en UE pour ce produit (cat A/d): 300 g/l. Ce produit contient au maximum 300 g/l COV. Nominal EU limit for this product is (cat A/d): 300 g/l This product contains max 300 g/I VOC. EWC: 081111 4 Obligatory supplemental Non-obligatory supplemental information according to information the VOC Directive

6.6 Single language label of a plant protection product for supply & use in form of a fold-out booklet

3 Example label 6.6 illustrates the use of a fold-out label for supply & use of a plant 4 protection product which is classified as skin irritant. The product is supplied to 5 professional users (farmers) only, but not to the general public.

6 The actual size of the label is larger than depicted here. However, as the total 7 amount of the obligatory and non-obligatory labelling information would have required 8 a label that is too large for the package (capacity of the bottle is 9 1 l), a fold-out label is used where parts can be removed from the packaging as 10 a standalone booklet. The outer page is coated; the information on the outer page 11 will remain on the package after removal of the inner pages of the fold-out label.

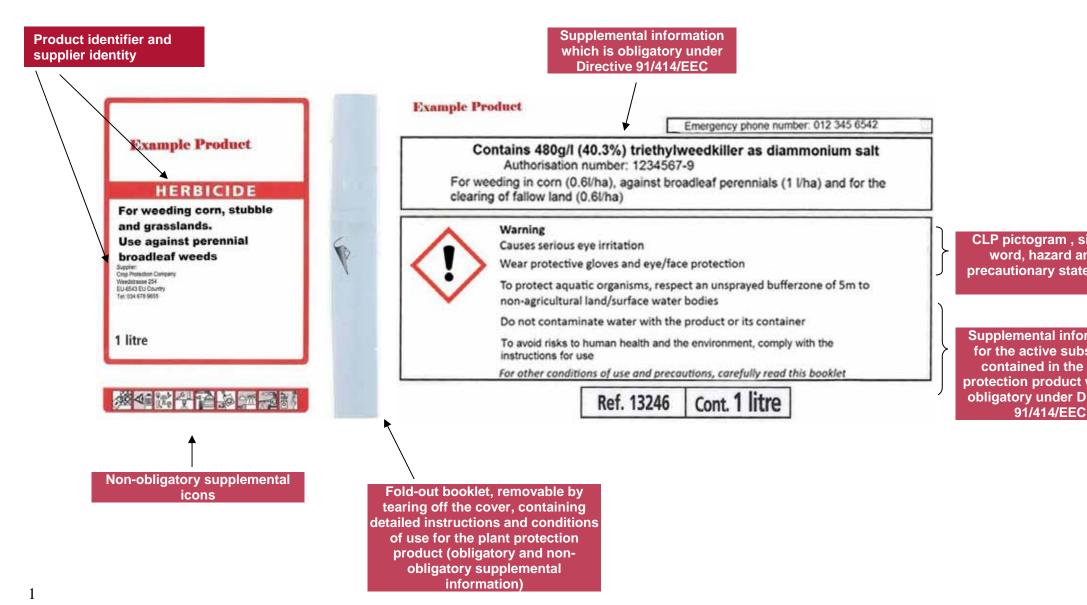
The space on the outer, coated page of the fold-out label is limited; it contains the 12 13 name and telephone number of the supplier, the product identifier according to CLP Article 18(3), i.e. the designation of the mixture, and the applicable hazard pictogram. 14 15 Beyond, it also displays further label elements that are considered relevant by the supplier, i.e. the signal word, the hazard and precautionary statement, as well as 16 17 supplemental information which is normally required for the label of a plant protection product, i.e. the concentration of the active substance contained, the field of 18 application, and the statements EUH401, SP1 and SPe3. However, as the space on 19 20 the outer, coated paged is limited, further labelling elements in accordance with 21 Article 16(1) (I), (m) and (n) of Directive 91/414/EEC are placed on the inner, 22 detachable part of the fold-out label (not shown).

23 Example label 6.6 is an example of how the requirements of CLP Article 25(3) in 24 relation to the non-obligatory labelling information, i.e. the supplemental icons and 25 the instructions and conditions for use, can be fulfilled. The obligatory label elements 26 are visibly separated from the non-obligatory labelling information: the latter is either 27 put in a different place on the label (supplemental icons) or also presented by 28 different means, i.e. a removable booklet (inner pages of the fold-out label) for the 29 non-obligatory instructions and conditions of use and remaining obligatory 30 supplemental label elements which do not appear on the outer page for space 31 reasons.

32 In the case of example label 6.6, a clear separation between the CLP labelling 33 elements set out under CLP Article 17(1)(a)-(g) and the supplemental, yet obligatory, 34 information requested by Directive 91/414/EEC was not performed: as the latter 35 supports the safe handling and use of a substance or mixture according to 36 harmonised Community rules, it was decided to have both types of obligatory 37 labelling information visibly on an equal footing on the label, except for those 38 elements which were put on the inner pages of the fold-out label because of space 39 constraints.

40 The label shown is primarily drafted for inner packaging which cannot be seen 41 through the outer packaging.

(draft)



6.7 Packaging that is small or difficult to label

The example labels in this section are authentic; they are applied on inner packaging
only because the package is transported in larger consignments with specific outside
labelling in accordance with the rules on the transport of dangerous goods.

5

6 6.7.1 n-Hexane in a 25 ml bottle

Example label 6.7.1 represents a two-language label in Swedish and Finnish for
small packaging for the substance n-hexane. Both languages are required in Finland.
According to Annex VI to CLP, the substance is assigned the following
classifications:

- 11flammable liquids cat. 2, reproductive toxicity cat. 2, aspiration toxicity cat. 1,12STOT-RE cat. 2, skin irritation cat. 2, STOT-SE cat. 3, aquatic chronic hazard13cat. 2.
- In accordance with the small packaging exemptions outlined in section 1.5.2 ofAnnex I to CLP, the hazard and precautionary statements pertaining to the hazards
- 16flammable liquids cat. 2, STOT-RE cat. 2, skin irritation cat. 2, STOT-SE cat.173 and aquatic chronic hazard cat. 2

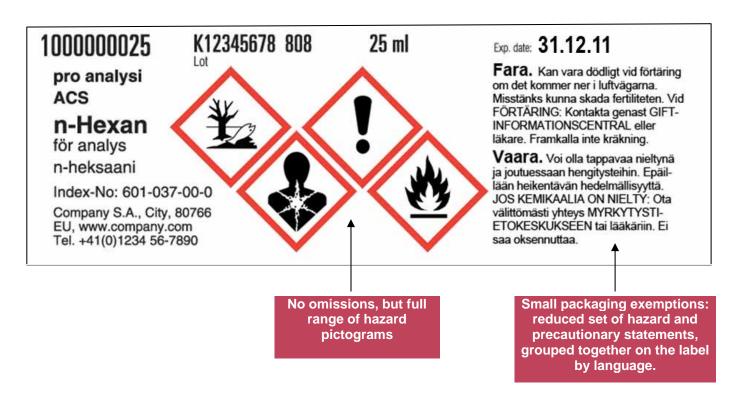
may be omitted from the label. However, and in line with CLP, the hazard pictograms
 GHS02, GHS07, GHS08, GHS09 were retained for these hazards.

No small packaging exemptions apply for the hazards reproductive toxicity cat. 2 and aspiration toxicity cat. 1. This means that the pictograms and the hazard and precautionary statements pertaining to these hazard classes have been retained (in Swedish and Finnish, see the language tables in Annex III and IV to CLP).

24 The precautionary statements have obviously been reduced, following CLP Article 22 25 and 28. For example, P501 (Dispose of contents/container to ...) was omitted, 26 probably because the substance is neither supplied to the general public nor are 27 there specific disposal requirements above the normal expectation for the disposal of 28 chemicals, see also section 7. Out of a set of originally 20 different precautionary 29 statements. finally only one single (combination) statement. namely 30 P301+P310+P331 (lf swallowed: Immediately call a poison centre or 31 doctor/physician. Do NOT induce vomiting.) remains for the label.

In accordance with CLP Article 32(3), the hazard statements of one language as well
 as the precautionary statements, respectively, are located together on the label.

Finally, the signal word "Danger" (Swedish: Fara; Finnish: Vaara) was selected, in line with the applicable precedence rule.



The real dimensions of the label are 32×95 mm. It can accommodate four pictograms of the required minimum size of 1 cm². This may not always be possible for even smaller packaging volumes, e.g. a bottle volume of 10 ml, see below. In order to maintain the required minimum size of 1 cm² for the hazard pictograms in such cases, either the size of the label or the volume of the bottle as such will have to be increased. It may not be warranted to reduce the letter size of the texts as this will very probably decrease their legibility.



6.7.2 Hazardous solid substance in a 25 ml bottle

2 Example label 6.7.2 represents a one-language label for small packaging for a 3 fictitious solid substance which is assigned the following classifications:

oxidising solids cat. 2, carcinogenicity cat. 1B, mutagenicity cat. 1B,
reproductive toxicity cat. 1B, acute toxicity cat. 2, acute toxicity cat. 3, STOTRE cat. 1, acute toxicity cat. 4, skin corrosion cat. 1B, respiratory sensitisation
cat. 1, skin sensitisation, cat. 1, aquatic acute hazard cat.1, aquatic chronic
hazard cat. 1.

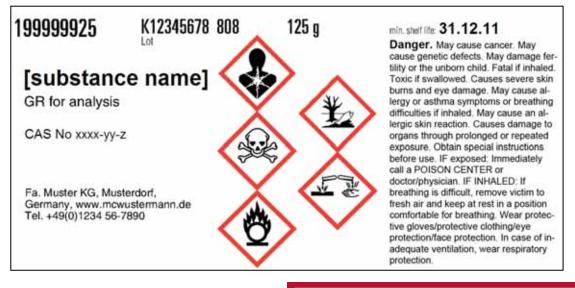
9 The substance is not presumed to be listed in Annex VI to CLP, nor in the 10 Classification and Labelling Inventory. Therefore, only the product identifiers referred 11 to in CLP Article 18(2)(c) need to be provided, i.e. the CAS number and the IUPAC or 12 international name. In accordance with the small packaging exemptions outlined in 13 section 1.5.2 of Annex I to CLP, only the hazard and precautionary statements 14 pertaining to the hazards

15 oxidising solids cat. 2, acute toxicity cat. 4, aquatic acute hazard cat.1, and 16 aquatic chronic hazard cat. 1

may be omitted from the label. This means that for all the other hazards listed above
all the label elements that are required under Title II of CLP should appear on the
label.

The precautionary statements on example label 6.7.2 start with "Obtain special instructions before use." A significant reduction has been performed for the precautionary statements, based on Articles 22 and 28 of CLP. After application of the small packaging exemptions and the selection of the most appropriate set of precautionary statements, only five (combined) statements were chosen for the label, out of about 30 precautionary statements.

In addition to the hazard and precautionary statements, five different hazard
 pictograms are required for the label, namely GHS03, GHS05, GHS06, GHS08 and
 GHS09.



Due to the severity of the hazards, substantial reduction of the hazard statements is not possible. The number of the precautionary statements, however, has been substantially reduced.

30

29

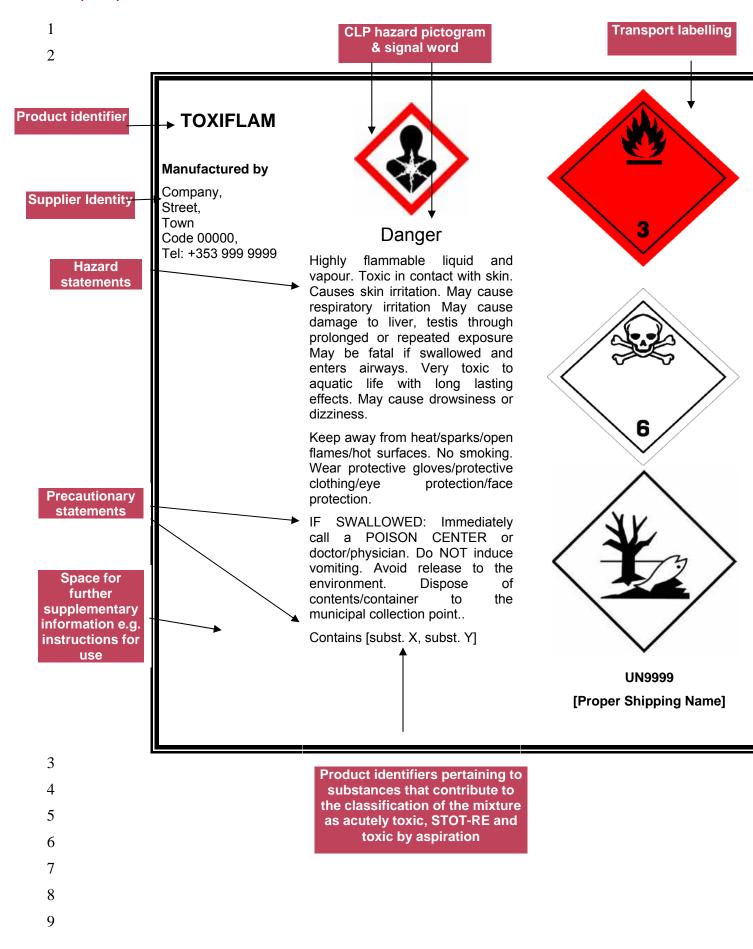
6.8 Supply and transport label for a single package

Example label 6.8 illustrates the provisions of CLP Article 33(3), it represents a label
 for a hazardous mixture which is assigned the following classifications:

flammable liquid cat. 2, acute dermal toxicity cat. 3, skin irritation cat. 2,
STOT-SE cat. 3 (H335), STOT-SE cat. 3 (H336), STOT-RE,cat. 2, aspiration
toxicity cat. 1, aquatic acute hazard cat.1, aquatic chronic hazard cat. 1

7 The mixture is not intended to be used by the general public. It is intended to be 8 supplied in single packaging, such as a 200 litre drum. This means that both the CLP 9 and the transport label elements must be shown on the packaging.

10 In this case the labeller has chosen to include the transport label elements and marks 11 together with the CLP labelling elements on a common label that would be large 12 enough to fulfil the dimension requirements for the labels and marks set out in the 13 rules on the transport of dangerous goods (100mm x 100mm). In relation to the CLP 14 hazard pictograms GHS06 and GHS07, only GHS06 needs to be displayed, in 15 accordance with the precedence rule set out in CLP Article 26(1)(b). However, the supplier has chosen to omit the CLP hazard pictogram GHS06 as well as GHS02as 16 17 the underlying hazards are already covered by the corresponding transport 18 pictograms.

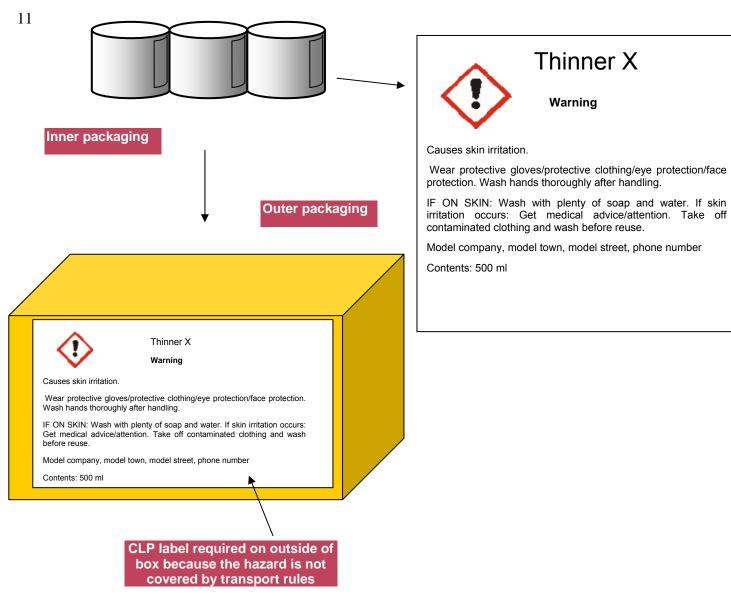


1 6.9 Labelling of a chemical that is transported on land in combination

2 packaging

Example label 6.9 illustrates the provisions of CLP Article 33(2). It is an example of a mixture which is not classified and labelled in accordance with the rules on the transport of dangerous goods, but under CLP. The chemical is transported on land and is contained in an inner packaging (cans) which is itself contained in outer packaging (box). This means that the same labelling information has to be provided both on the inner packaging and on the outer packaging.

- 9 The mixture is not intended to be used by the general public.
- 10



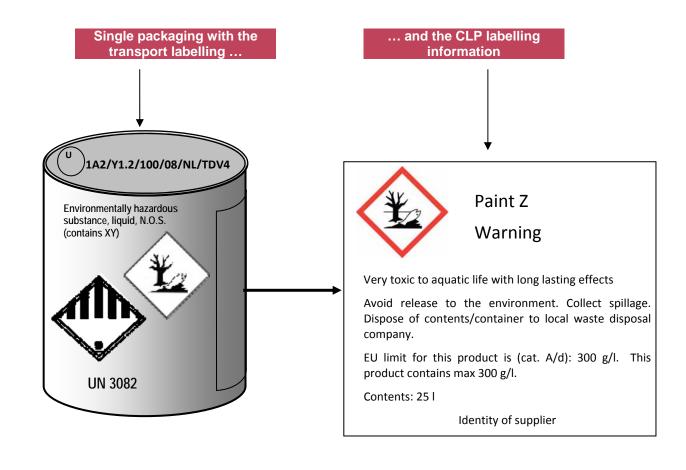
1 6.10 Labelling of a chemical that is transported on land in single

2 packaging

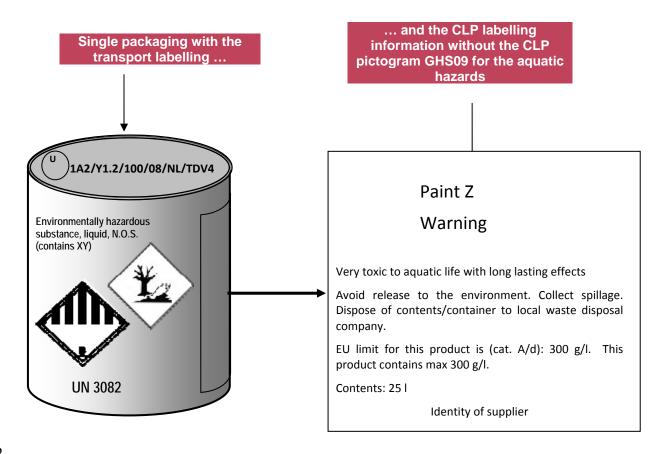
Example label 6.10 illustrates the provisions related to the labelling of single
packaging in accordance with CLP Article 33(3). It is an example of a chemical that is
classified and labelled in accordance with the rules on the transport of dangerous
goods and under CLP. The chemical is transported on land in single packaging (can).
It is not intended to be used by the general public.

- 8 In this example the full CLP labelling information is provided by means of a separate 9 label, in addition to the transport labelling information (version 1).
- 10 The CLP hazard pictogram may be omitted from the packaging because it relates to
- 11 the same hazards as the "dead tree dead fish" transport mark (version 2).

12 Version 1:



1 Version 2:



7. Guidance on the selection of precautionary statements for the CLP hazard label

3 7.1 Introduction

8

9

10

11

Based on the UN GHS, the CLP Regulation assigns precautionary statements to all
hazard classes for the purpose of the safe supply and use of a substance or mixture.
Based on CLP Article 4, the following suppliers have to select precautionary
statements for the CLP hazard label:

- manufacturers or importers of substances,
 - importers of mixtures;
 - downstream users of substances or mixtures (including formulators),
 - distributors (including retailers) of substances or mixtures, and
- producers or importers of explosive articles as defined in Part 2.1 of Annex I
 to CLP

The selection of precautionary statements should be done based on CLP Articles 22and 28 and CLP Annex IV:

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 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.

Annex IV

In selecting the precautionary statements in accordance with Articles 22 and 28(3), suppliers may combine the precautionary statements in the table [of Annex IV], having regard to clarity and comprehensibility of the precautionary advice. ...

16

17 While there were legally binding selection rules for the safety (S-) phrases under 18 Annex VI to the Dangerous Substances Directive 67/548/EEC (DSD), neither the UN

1 GHS nor the CLP Regulation currently provide for clear-cut rules on how to select 2 precautionary statements for the label, apart from the generic provisions set out in 3 CLP Articles 22 and 28 and the basic instructions specified in the columns containing 4 the conditions for use in tables 6.1-6.5 of Annex IV to CLP. On the other hand, the 5 number of precautionary statements under CLP / GHS has more than doubled when 6 compared to the number of S-phrases under DSD. In a situation where selection 7 rules are missing, an average hazardous substance listed in Annex VI to CLP could 8 easily be assigned more than 20 precautionary statements on the label, based on the 9 hazards of the substance, see also section 3.4 of this document. As CLP requires 10 that normally not more than six precautionary statements shall appear on the label, a 11 substantial reduction of the number of precautionary statements must be performed, 12 based on effective selection rules.

Overall positive experience has been made in the past decades with the use of the
 S-phrases. The main characteristics of the S-phrase selection system as set out in
 part 6 of Annex VI to DSD are

- the establishment of a hierarchy (order of precedence) between individual S phrases indicating that certain phrases may be omitted from the label in case
 certain others are already assigned;
- a gradation between obligatory and recommended phrases to reflect a particular hazard, taking into account the specific properties of the substance (or mixture), the message already contained in the risk phrase, the intended use(s) of the substance or mixture, practical experience and in some cases also specific target groups;
- the combination of several S-phrases into one phrase only, e.g. S36/37 –
 Wear suitable protective clothing and gloves.

26 **7.2 Approach to guidance**

27 In view of the positive experience made with the S-phrase selection system, it is 28 proposed to employ a comparable system for the selection of the precautionary 29 statements under CLP. This system should build on the generic provisions set out in 30 CLP Articles 22 and 28 and the basic instructions provided in the columns containing 31 the conditions for use in tables 6.1-6.5 of Annex IV to CLP and which are mentioned 32 directly under the precautionary statements in the selection tables below. In order to 33 establish such a system and to draw on past experience as much as possible, the 34 following approach was chosen:

- The S-phrases from DSD are assigned to the most closely corresponding precautionary statements under CLP;
- The selection rules for the S-phrases as set out in Annex VI to DSD are translated into conditions of use for the precautionary statements as far as possible, on the basis of comparable underlying hazards and of similar wording of the S-phrases and precautionary statements;
- In case such translations are not possible, further conditions for use or adaptations are specified, e.g. "Highly recommended where liquid splashes may occur, e.g. during transfer of cryogenic liquids. In this case the use of safety glasses with side shields and a face shield should be indicated in the Safety Data Sheet." for P282 for the hazard refrigerated liquefied gases;

- 1 For some hazards the use of many specific precautionary statements will 2 normally have to be recommended. As a consequence the number of 3 precautionary statements on the label will easily exceed the target number of 4 six even for simple substances. On the other hand, the label, as compared to 5 the Safety Data Sheet, does not always appear to be the only and most 6 appropriate means to convey a message to industrial/professional users, e.g. 7 for P241 (Use explosion-proof electrical/ventilating/lighting/ .../equipment.). In 8 such cases the guidance also refers to the Safety Data Sheet, typically by 9 phrasing both a recommendation for the label and for the Safety Data Sheet. 10 The recommendation for inclusion on the label is then weaker than for the 11 Safety Data Sheet, see e.g. P241 for flammable liquids or P373 for explosive 12 hazards. In some cases, e.g. for P501 for explosive hazards, it is even 13 recommended to put the relevant precautionary statements in the Safety Data Sheet only, e.g. under heading 13 "disposal considerations" for P501, instead 14 15 of on the label.
- In relation to the physical hazards it should always be checked whether
 substances or mixtures displaying these hazards are supplied to or handled
 by the general public. Where this is not the case, the use of further
 precautionary statements could be de-prioritised (= weaker recommendation).
- 20 The conditions of use distinguish between precautionary statements that are • 21 "highly recommended", "recommended", "optional" and "not to be used" for 22 the hazard label. A particular recommendation should be seen in the light of 23 the original CLP (UN) conditions for use specified under the pertinent 24 precautionary statement in the selection tables. The target groups "for the 25 general public" and "for industrial/professional users" are specified; where 26 there is no explicit specification of the target group, the conditions for use 27 apply to both the general public and industrial/professional users;
- 28 Where the use of a particular precautionary statement is (highly) • 29 recommended but some exemptions are indicated ("unless" condition), it 30 should not be used where the conditions specified in the "unless" clause 31 apply, e.g. P264 for the hazard skin corrosion (skin category 1) should not be used for industrial/professional users where P280 has already been selected 32 33 for the hazard label of the substance or mixture. Vice versa, where a 34 precautionary statement is only optional, it should be used where the 35 conditions specified in the "unless" clause apply, e.g. P410 for the hazard 36 class "Gases under pressure" should be applied in case the described gases 37 are subject to (slow) decomposition or polymerisation;
- Similar to the previous bullet: where the use of a particular precautionary statement is (highly) recommended under certain conditions only, it should not be used where these conditions do not apply, e.g. P260 should not be used where a skin corrosive substance is not highly volatile;
- Where it is proposed to combine two or more precautionary statements that could also be used on their own, the conditions of use specify "(highly) recommended, in combination with Pxxx", e.g. "Highly recommended, in combination with P302+P350" for P310 for the hazard acute toxicity dermal, category 1 and 2;
- The UN conditions for use as set out in the tables of Section 3 of Annex 3 to
 the UN GHS and which are reflected in the "conditions for use" columns in
 tables 6.1 6.5 of Annex IV to the CLP Regulation are taken into account;

- (ura
- 1 2

 Additional guidance is provided for the application of the precautionary statements P101, P102 and P103 for hazardous substances and mixtures supplied to the general public.

3 4

The selection tables in section 7.3 follow the format as provided in Section 3 of 5 6 Annex 3 to the UN GHS; they are arranged according to hazard class and category as appropriate. This approach is different from the format presented in Annex IV to 7 8 the CLP Regulation but was considered appropriate because it reflects the actual process of assigning precautionary statements based on classification. The original 9 10 CLP (UN) conditions for use are displayed in black colour (normal letters and italics) under the pertinent precautionary statements in the selection tables below. In 11 12 contrast, those conditions of use inserted in the tables which constitute EU guidance 13 are marked with an asterisk bullet ***** and in blue colour, in order to distinguish them from the original CLP (UN) conditions for use, see also the columns containing 14 15 the conditions for use in tables 6.1 – 6.5 of Annex IV to the CLP Regulation.

16 For some hazard classes/-categories the assignment of precautionary statements 17 and corresponding conditions for use is proposed although they are not assigned 18 based on the UN GHS and the CLP Regulation. This applies in most cases to self-19 reactive substances and mixtures and organic peroxides. The guiding principle for 20 these additional assignments is that the same (response) precautionary statements 21 should be applied to self-reactive substances and mixtures and organic peroxides. 22 Where corresponding assignments and conditions for use are proposed, this is 23 highlighted with the notion "add" after the code for the precautionary statement. It is 24 the goal to introduce these changes at UN level as well.

In selecting the precautionary statements in accordance with the conditions for use set out in the tables, suppliers may combine these statements, having regard to clarity and comprehensibility of the precautionary advice. In this case the specific wording of the component phrases combined should be retained.

29 It should be noted that for substances and mixtures which display physical, health 30 and environmental hazard classifications at the same time a selection based on the 31 rules outlined in this guidance may still lead to a final set that exceeds the target 32 number of six statements for the label significantly, see the example of dimethyl zinc 33 below. Even if this could in principle be justified by CLP Article 28(3), the question 34 remains whether the extent of the labelling information is still digestible, in particular 35 where long combination statements appear. However, real-life experience which can 36 lead to further reduction/de-prioritisation is missing at the time when this guidance is 37 drafted. Until this experience has come in, it is proposed to verify with the set that 38 has been selected on the basis of this guidance whether

- Certain prevention and response statements provide more urgent advice than
 other statements. This judgement can only be done on a case-by-case basis
 and will strongly depend on the hazards involved;
- Whether to de-select those statements which appear less urgent from the
 label and put them in the Safety Data Sheet instead.

Where a Safety Sheet must be prepared, the precautionary statements selected for the CLP hazard label have to be included in the Safety Data Sheet, under heading 2.2 ("Labelling elements"), see the (draft) guidance on the compilation of Safety Data Sheets. The de-selected statements can be introduced under the relevant headings of the Safety Data Sheet as well, to provide the industrial or professional user with sufficient information to handle the substance or mixture safely.

- 1 The presentation of these tables is followed by two examples of substances where
- 2 the selection of precautionary statements for the label is illustrated.

3 7.3 Selection Tables

4 **7.3.1 General Precautionary Statements**

Precautionary Statement
P101
If medical advice is needed, have product container or label at hand.
- Consumer products
★ Highly recommended for all substances and mixtures classified for health hazards and that are sold to the general public"
P102
Keep out of reach of children.
- Consumer products
★ Highly recommended for substances and mixtures sold to the general public, except for those only classified as hazardous to the environment
P103
Read label before use.
- Consumer products
★ Optional, but may be required by other Community legislation

7.3.2 Specific Precautionary Statements for Physical Hazards

7.3.2.1 Explosives

Hazard category	
Unstable explosive	

Signal word Danger

Hazard statement H200 Unstable explosive



Precautionary Statements			
Prevention	Response	Storage	Disposal
P201	P372	P401	P501
 Obtain special instructions before use. ★ Highly recommended P202 Do not handle until all safety precautions have been read and understood. ★ Optional where P201 has already been assigned P281 Use personal protective equipment as required. ★ Highly recommended 	 Explosion risk in case of fire. Highly recommended P373 DO NOT fight fire when fire reaches explosives. Recommended Highly recommended for inclusion in the Safety Data Sheet P380 Evacuate area. Highly recommended, in combination with P372 	 Store In accordance with local/regional/national/international regulations (to be specified). Highly recommended for inclusion in the Safety Data Sheet. Specify the applicable regulation. (example for the German context: "Gemäß 2. SprengV aufbewahren.") 	 Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified). ★ Recommended for inclusion in the Safety Data Sheet if there are specific disposal requirements above the normal expectation for the disposal of chemicals. Specify the applicable regulation.

7.3.2.1 Explosives

Hazard category	Signal word	Hazard statement
Division 1.1	Danger	H201 Explosive; mass explosion hazard
Division 1.2	Danger	H202 Explosive; severe projection hazard
Division 1.3	Danger	H203 Explosive; fire, blast or projection hazard



Precautionary Statements			
Prevention	Response	Storage	Disposal
P210	P370 + P380	P401	P501
Keep away from heat/sparks/open flames/hot surfaces. – No smoking.Manufacturer/supplier to applicable ignition source(s).specify★ Highly recommendedP230Keep wetted with Manufacturer/supplier to appropriate material.	 In case of fire: evacuate area. ★ Highly recommended P372 Explosion risk in case of fire. ★ Highly recommended, in combination with P370+P380: Explosion risk in case of fire: evacuate area P373 	 Store In accordance with local/regional/national/international regulations (to be specified). Highly recommended for inclusion in the Safety Data Sheet. Specify the applicable regulation. (example for the German context: "Gemäß 2. SprengV aufbewahren.") 	 Dispose of contents/container to in accordance with local/regional/national/internatio nal regulations (to be specified). ★ Recommended for inclusion in the Safety Data Sheet if there are specific disposal requirements above the normal expectation for the disposal of chemicals.
★ Highly recommended for substances and mixtures which are wetted, diluted, dissolved or suspended with a phlegmatiser in order to reduce or suppress their explosive properties (desensitized explosives). The appropriate material is to be specified.	 DO NOT fight fire when fire reaches explosives. * Recommended * Highly recommended for inclusion in the Safety Data Sheet 		Specify the applicable regulation.

(draft)

Precautionary Statements			
Prevention	Response	Storage	Disposa
P240			
Ground/bond container and receiving equipment.			
- if the explosive is electrostatically sensitive.			
★ Optional unless other considerations deem it necessary			
★ Recommended for inclusion in the SDS			
P250			
Do not subject to grinding/shock//friction.			
Manufacturer/supplier to specify applicable rough handling.			
★ Highly recommended if the explosive is mechanically sensitive			
★ Optional for other explosives than those mentioned above			
P280			
Wear protective gloves/protective clothing/eye protection/ face protection.			
Manufacturer/supplier to specify type of equipment.			

Precautionary Statements			
Prevention	Response	Storage	Disposal
- specify face protection.			
★ Protective gloves/protective clothing/eye protection highly recommended for industrial/professional users			
 Face protection highly recommended for industrial/professional users where articles are able to form hazardous fragments 			
★ Optional for explosives supplied to the general public			
P234 (add)			
Keep only in original container.			
★ Highly recommended			

7.3.2.1 Explosives

Hazard category
Division 1.4

Signal word Warning Hazard statement



H204	Fire or projection hazard
------	---------------------------

Precautionary Statements			
Prevention	Response	Storage	Disposal
P210	P370 + P380	P401	P501
 Keep away from heat/sparks/open flames/hot surfaces No smoking. Manufacturer/supplier to specify applicable ignition source(s). ★ Highly recommended P240 Ground/bond container and receiving equipment. - if the explosive is electrostatically sensitive. ★ Optional unless other considerations deem it necessary ★ Recommended for inclusion in the Safety Data Sheet P250 Do not subject to grinding/shock//friction. 	 In case of fire: Evacuate area. ★ Highly recommended P372 Explosion risk in case of fire. except if explosives are 1.4S AMMUNITION AND COMPONENTS THEREOF. ★ Highly recommended, except for division 1.4S, in combination with P370+P380: Explosion risk in case of fire: evacuate area P373 DO NOT fight fire when fire reaches explosives. ★ Recommended ★ Highly recommended for inclusion in the Safety Data Sheet 	 Store In accordance with local/regional/national/international regulations (to be specified). Highly recommended for inclusion in the Safety Data Sheet. Specify the applicable regulation. (example for the German context: "Gemäß 2. SprengV aufbewahren.") 	 Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified). ★ Recommended for inclusion in the Safety Data Sheet if there are specific disposal requirements above the normal expectation for the disposal of chemicals. Specify the applicable regulation.

(draft)

 Manufacturer/supplier or the competent authority to specify applicable rough handling. Highly recommended if the explosive is mechanically sensitive Optional for other explosives than those mentioned above P280 	 P374 Fight fire with normal precautions from a reasonable distance. If explosives are 1.4S AMMUNITION AND COMPONENTS THEREOF. ★ Highly recommended for division 1.4S 	
Wear protective gloves/protective clothing/eye protection/ face protection.		
Manufacturer/supplier to specify type of equipment.		
- specify face protection.		
 Protective gloves/protective clothing/eye protection highly recommended for industrial / professional users 		
 Face protection highly recommended for industrial / professional users where articles are able to form hazardous fragments 		
★ Optional for explosives supplied to the general public		
P234 (add)		
Keep only in original container.		
★ Highly recommended		

7.3.2.1 Explosives

Hazard	category
--------	----------

Division 1.5

Signal word Danger Hazard statement

H205 May mass explode in fire

	Precautionary Sta	tements	
Prevention	Response	Storage	Disposal
P210	P370 + P380	P401	P501
 Keep away from heat/sparks/open flames/hot surfaces. – No smoking. Manufacturer/supplier to specify applicable ignition source(s). ★ Highly recommended P230 Keep wetted with 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> ★ Highly recommended for substances and mixtures which are wetted, diluted, dissolved or suspended with a phlegmatiser in order to reduce or suppress their explosive properties 	In case of fire: Evacuate area. * Highly recommended P372 Explosion risk in case of fire. * Highly recommended P373 DO NOT fight fire when fire reaches explosives. * Recommended * Highly recommended for inclusion in the Safety Data Sheet	 Store In accordance with local/regional/national/international regulations (to be specified). ★ Highly recommended for inclusion in the Safety Data Sheet. Specify the applicable regulation (example for the German context: "Gemäß 2. SprengV aufbewahren.") 	 Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified). ★ Recommended for inclusion in the Safety Data Sheet if there are specific disposal requirements above the normal expectation for the disposal of chemicals. Specify the applicable regulation.

(draft)

Precautionary Statements				
Prevention	Response	Storage	Disposal	
appropriate material is to be specified.				
P240				
Ground/bond container and receiving equipment.				
- if the explosive is electrostatically sensitive.				
★ Optional unless other considerations deem it necessary				
★ Recommended for inclusion in the Safety Data Sheet				
P250				
Do not subject to grinding/shock//friction.				
Manufacturer/supplier or the competent authority to specify applicable rough handling.				
★ Highly recommended if the explosive is mechanically sensitive				
★ Optional for other explosives than those mentioned above				
P280				
Wear protective gloves/protective clothing/eye protection/ face				

Precautionary Statements			
Prevention	Response	Storage	Disposa
protection.			
Manufacturer/supplier to specify type of equipment.			
- specify face protection.			
 Protective gloves/protective clothing/eye protection highly recommended for industrial / professional users 			
★ Face protection highly recommended for industrial / professional users where articles are able to form hazardous fragments			
★ Optional for explosives supplied to the general public			
P234 (add)			
Keep only in original container.			
★ Highly recommended			

7.3.2.2 Flammable Gases

Hazard category	Signal word	Hazard statement
1	Danger	H220 Extremely flammable gas
2	Warning	H221 Flammable gas



Precautionary Statements			
Prevention	Response	Storage	Disposal
P210	P377	P403	
Keep away from heat/sparks/open flames/hot surfaces. – No smoking.	Leaking gas fire: Do not extinguish, unless leak can be stopped safely.	Store in well-ventilated place.	
Manufacturer/supplier to specify applicable ignition source(s).	★ Highly recommended	★ Highly recommended	
	P381		
★ Highly recommended	Eliminate all ignition sources if safe to do so.		
	* Recommended		



7.3.2.3 Flammable Aerosols

Hazard category	Signal word	Hazard statement
1	Danger	H222 Extremely flammable aerosol
2	Warning	H223 Flammable aerosol

Precautionary Statements			
Prevention	Response	Storage	Disposal
P210		P410 + P412	
Keep away from heat/sparks/open flames/hot surfaces. – No smoking.		Protect from sunlight. Do not expose to temperatures exceeding 50° C /	
Manufacturer/supplier to specify applicable ignition source(s).	★ Highly recommended, unless a		
★ Highly recommended, unless a similar statement is assigned in accordance with Directive 75/324/EEC		similar statement is assigned in accordance with Directive 75/324/EEC	
P211			
Do not spray on open flame or other ignition source.			
★ Highly recommended, unless a similar statement is assigned in accordance with Directive 75/324/EEC			
P251			
Pressurized container: Do not pierce or burn, even after use.			
 Highly recommended, unless a similar statement is assigned in accordance with Directive 75/324/EEC 			

7.3.2.4 Oxidising Gases

Hazard	category
1	

Signal word Danger Hazard statement H270 May cause or intensify fire; oxidizer



Precautionary Statements			
Prevention	Response	Storage	Disposal
P220	P370 + P376	P403	
Keep/Store away from clothing// combustible materials.	In case of fire: Stop fire if safe to do so.	Store in a well-ventilated place.	
Manufacturer/supplier to specify other	★ Optional	★ Highly recommended	
incompatible materials.	★ Recommended for inclusion in the		
★ Highly recommended	Safety Data Sheet.		
P244			
Keep reduction valves free from grease and oil.			
★ Highly recommended			
Note that this statement might be reworded as <i>Keep valves and fittings free from oil and grease</i> , in accordance with the 4 th revised edition of the UN GHS			

7.3.2.5 Gases under Pressure

Hazard category	Signal word	Hazard statement
Compressed gas	Warning	H280 Contains gas under pressure; may explode if heated
Liquefied gas	Warning	H280 Contains gas under pressure; may explode if heated
Dissolved gas	Warning	H280 Contains gas under pressure; may explode if heated



	Precautionary Statements			
Prevention	Response Storage Disposal		Disposal	
		P410 + P403		
		Protect from sunlight. Store in a well-ventilated place.		
		★ P410: Optional for gases filled in transportable gas cylinders in accordance with packing instruction P200 of the UN Recommendations on the Transport of Dangerous Goods, Model Regulations, unless those gases are subject to (slow) decomposition or polymerisation		
		★ P403: Optional		

7.3.2.5 Gases under Pressure

Hazard category	Signal word
Refrigerated liquefied gas	Warning

Hazard statement

H281 Contains refrigerated gas; may cause cryogenic burns or injury



Precautionary Statements			
Prevention	Response	Storage	Disposal
P282	P336	P403	
Wear cold insulating gloves/face shield/eye protection.	Thaw frosted parts with lukewarm water. Do not rub affected area.	Store in a well-ventilated place.	
 Highly recommended where liquid splashes may occur, e.g. during 	★ Highly recommended	★ Optional	
transfer of cryogenic liquids. In this case the use of safety glasses with side shields and a face shield should be indicated in the Safety Data Sheet.	 P315 Get immediate medical advice/attention. ★ Recommended, in combination with P336 		

7.3.2.6 Flammable Liquids

Hazard category	Signal word	Hazard statement
1	Danger	H224 Extremely flammable liquid and vapour.
2	Danger	H225 Highly flammable liquid and vapour.
3	Warning	H226 Flammable liquid and vapour.



Precautionary Statements			
Prevention	Response	Storage	Disposal
P210	P303 + P361 + P353	P403 + P235	P501
Keep away from heat/sparks/open flames/hot surfaces. – No smoking.	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing.	Store in a well-ventilated place. Keep cool.	Dispose of contents/container to
Manufacturer/supplier to specify applicable ignition source(s).	Rinse skin with water/shower.* Optional unless deemed necessary,	 Highly recommended for flammable liquids 	local/regional/national/international regulations (to be specified).
★ Highly recommended	e.g. due to the risk of generating a potentially explosive atmosphere	category 1 and other liquids that are volatile	★ Highly recommended for the general
P233	P370 + P378	so as to generate a	public if the substance / mixture is subject to legislation on hazardous
Keep container tightly closed.	In case of fire: Use for extinction.	potentially explosive atmosphere	waste. It is recommended to specify the site of disposal while a reference
★ Highly recommended for category 1, unless P404 has already been assigned	Manufacturer/supplier to specify appropriate media.		to the applicable legislation is not necessary.
★ Recommended for category 2, unless P404 has already been assigned	- if water increases risk.		 Recommended for industrial / professional users if there are specific
★ Optional for category 3	 Highly recommended if specific extinction media are required or 		disposal requirements above the
★ Recommended if product is volatile so as to generate a potentially explosive atmosphere, unless P404 has already been assigned	appropriate, e.g. if water is ineffective or if water increases risk		normal expectation for the disposal of chemicals It is recommended to specify the site of disposal while a reference to the applicable legislation is not necessary.

Precautionary Statements			
Prevention	Response	Storage	Disposal
P240			
Ground/bond container and receiving equipment.			
- if electrostatically sensitive material is for reloading.			
- If product is volatile so as to generate hazardous atmosphere.			
★ Optional unless other considerations deem it necessary			
★ Recommended for inclusion in the Safety Data Sheet			
P241			
Use explosion-proof electrical/ventilating/ lighting//equipment.			
Manufacturer/supplier to specify other equipment.			
★ Optional unless other considerations deem it necessary			
★ Recommended for inclusion in the Safety Data Sheet			
P242			
Use only non-sparkling tools.			
 Optional unless other considerations deem it necessary 			

Precautionary Statements			
Prevention	Response	Storage	Disposal
★ Recommended for inclusion in the Safety Data Sheet			
P243			
Take precautionary measures against static discharge.			
★ Optional unless other considerations deem it necessary			
★ Recommended for inclusion in the SDS			
P280			
Wear protective gloves/protective clothing/eye protection/ face protection.			
Manufacturer/supplier to specify type of equipment.			
- specify protective gloves and eye/face protection.			
★ Optional			

7.3.2.7 Flammable Solids

Hazard category	Signal word	Hazard statement
1	Danger	H228 Flammable solid
2	Warning	H228 Flammable solid



Precautionary Statements			
Prevention	Response	Storage	Disposal
Prevention P210 Keep away from heat/sparks/open flames/hot surfaces. – No smoking. Manufacturer/supplier to specify applicable ignition source(s). Highly recommended P240 Ground/bond container and receiving equipment if electrostatically sensitive material is for reloading. Optional unless other considerations deem it necessary	Response P370 + P378 In case of fire: Use for extinction. Manufacturer/supplier to specify appropriate media. - if water increases risk. * Highly recommended if specific extinction media are required or appropriate, e.g. if water is ineffective or if water increases risk	Storage	Disposal
 Recommended for inclusion in the Safety Data Sheet P241 Use explosion-proof electrical/ventilating/ lighting//equipment. Manufacturer/supplier to specify other equipment. if dust clouds can occur. 			

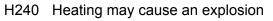
	Precautionary Statements		
Prevention	Response	Storage	Disposal
★ Optional unless other considerations deem it necessary			
★ Recommended for inclusion in the Safety Data Sheet			
P280			
Wear protective gloves/protective clothing/eye protection/ face protection.			
Manufacturer/supplier to specify type of equipment.			
- specify protective gloves and eye/face protection.			
★ Optional			

7.3.2.8 Self-Reactive Substances and Mixtures

Hazard	category
Туре А	

Signal word Danger

Hazard statement





Precautionary Statements			
Prevention	Response	Storage	Disposal
P210	P370 + P378	P403 + P235	P501
 Keep away from heat/sparks/open flames/hot surfaces. – No smoking. Manufacturer/supplier to specify applicable ignition source(s). ★ Highly recommended P220 Keep/Store away from clothing// combustible materials. Manufacturer/supplier to specify other incompatible materials. ★ Recommended ★ Highly recommended for inclusion in the Safety Data Sheet P234 Keep only in original container. 	 In case of fire: Use for extinction. Manufacturer/supplier to specify appropriate media. <i>if water increases risk.</i> * Normally not to be used due to the risk of explosion P370 + P380 + P375 In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion. * Highly recommended to use P370+P380 only; P375 not to be used 	 P403 + P235 Store in a well-ventilated place. Keep cool. ★ P403: Highly recommended ★ P235: Highly recommended, in combination with P403, unless P411 has already been assigned P411 Store at temperatures not exceeding^o C /^o F. Manufacturer/supplier to specify temperature. ★ Highly recommended if SADT ≤ 50 °C or if otherwise deemed necessary, in combination 	 Dispose of contents/container to in accordance with local/regional/national/internatio nal regulations (to be specified). ★ Recommended for inclusion in the Safety Data Sheet if there are specific disposal requirements above the normal expectation for the disposal of chemicals. Specify the applicable regulation.
★ Highly recommended where the		with P403	

Precautionary Statements			
Prevention	Response	Storage	Disposal
container is important for preventing or suppressing the effect of dangerous reactions or explosion		P420 Store away from other materials.	
P280 Wear protective gloves/protective clothing/eye protection/ face protection.		★ Recommended where incompatible materials are likely to produce a	
Manufacturer/supplier to specify type of equipment. - specify protective gloves and eye/face protection.	particular risk. If this statement is used, text clarifying the incompatible materials should be added as supplemental		
 ★ Highly recommended 		 Mathematical information. Optional where P220 has already been assigned 	

7.3.2.8 Self-Reactive Substances and Mixtures

Туре В

Hazard category

Signal word Danger Hazard statement H241 Heating may cause a fire or explosion



Precautionary Statements			
Prevention	Response	Storage	Disposal
P210	P370 + P378	P403 + P235	P501
Keep away from heat/sparks/open flames/hot surfaces. – No smoking.	In case of fire: Use for extinction. Manufacturer/supplier to specify	Store in a well-ventilated place. Keep cool.	Dispose of contents/container to
Manufacturer/supplier to specify applicable	appropriate media.	★ P403: Highly recommended	in accordance with
ignition source(s). ★ Highly recommended	 <i>if water increases risk.</i> Highly recommended if specific 	★ P235: Highly recommended, in combination with P403,	local/regional/national/international regulations (to be specified).
P220	extinction media are required or	unless P411 has already been assigned	 Highly recommended for the general public if the substance /
Keep/Store away from clothing// combustible materials.	appropriate, e.g. if water is ineffective or if water increases risk	P411	mixture is subject to legislation on hazardous waste. It is
Manufacturer/supplier to specify other incompatible materials.	P370 + P380 + P375	Store at temperatures not exceedingº C /º F.	recommended to specify the site of disposal while a
* Recommended	In case of fire: Evacuate area. Fight fire remotely due to the risk of	Manufacturer/supplier to specify temperature.	reference to the applicable legislation is not necessary.
★ Highly recommended for inclusion in the Safety Data Sheet	★ Highly recommended	 ★ Highly recommended if SADT ≤ 50 °C or if otherwise 	★ Recommended for inclusion in the Safety Data Sheet if there
P234		deemed necessary, in	are specific disposal requirements above the normal
Keep only in original container.		combination with P403 P420	expectation for the disposal of chemicals. Specify the
★ Highly recommended		Store away from other	applicable regulation.

Precautionary Statements			
Prevention Response Storage Disposal			Disposal
P280		materials.	
Wearprotectivegloves/protectiveclothing/eye protection/ face protection.Manufacturer/suppliertospecifytypeofequipment.		★ Recommended where incompatible materials are likely to produce a particular risk. If this statement is used, text clarifying the	
 specify protective gloves and eye/face protection. Highly recommended 		incompatible materials should be added as supplemental information	
		★ Optional where P220 has already been assigned	

7.3.2.8 Self-Reactive Substances and Mixtures

Hazard category	Signal word	Hazard statement
Туре С	Danger	H242 Heating may cause a fire
Туре D	Danger	H242 Heating may cause a fire
Туре Е	Warning	H242 Heating may cause a fire
Туре F	Warning	H242 Heating may cause a fire



Precautionary Statements						
Prevention	Response	Storage	Disposal			
P210	P370 + P378	P403 + P235	P501			
Keep away from heat/sparks/open flames/hot surfaces. – No smoking. Manufacturer/supplier to specify applicable ignition source(s).	In case of fire: Use for extinction. Manufacturer/supplier to specify appropriate media. - if water increases risk.	Store in a well-ventilated place. Keep cool. * P403: Highly recommended	Dispose of contents/container toinaccordancewithlocal/regional/national/internationalregulations (to be specified).			
 ★ Highly recommended P220 Keep/Store away from clothing// combustible materials. 	 Highly recommended if specific extinction media are required or appropriate, e.g. if water is ineffective or if water increases risk 	 ★ P235: Highly recommended, in combination with P403, unless P411 has already been assigned 	 Highly recommended for the general public if the substance / mixture is subject to legislation on hazardous waste. It is recommended to specify the site of disposal while a reference to the applicable legislation is not necessary. 			
 Manufacturer/supplier to specify other incompatible materials. Recommended Highly recommended for inclusion in the Safety Data Sheet 		P411 Store at temperatures not exceeding ^o C / ^o F. Manufacturer/supplier to specify temperature.	 Recommended for inclusion in the Safety Data Sheet if there are specific disposal requirements above the normal expectation for the disposal of chemicals. Specify the applicable 			
P234		 ★ Highly recommended if SADT ≤ 50 °C or if 	regulation.			

Precautionary Statements				
Prevention	Response	Storage	Disposal	
 Keep only in original container. Highly recommended P280 Wear protective gloves/protective clothing/eye protection/ face protection. Manufacturer/supplier to specify type of equipment. specify protective gloves and eye/face protection. * Highly recommended 		otherwise deemed necessary, in combination with P403.P420Store away from other materials.* Recommended where incompatible materials are likely to produce a particular risk. If this statement is used, text clarifying the incompatible materials should be added as supplemental information* Optional where P220 has already been assigned		

7.3.2.9 Pyrophoric Liquids

Hazard	category
1	

Signal word

Danger

Hazard statement

H250 Catches fire spontaneously if exposed to air



Precautionary Statements					
Prevention	Response	Storage	Disposal		
P210	P302 + P334	P422			
Keep away from heat/sparks/open flames/hot surfaces. – No smoking.	IF ON SKIN: Immerse in cool water/wrap in wet bandages.	Store contents under Manufacturer/supplier to			
Manufacturer/supplier to specify applicable ignition source(s).	 Highly recommended P370 + P378 	specify appropriate liquid or inert gas.			
 Highly recommended P222 	In case of fire: Use for extinction.	 Recommended if a specific inert gas or liquid is required, unless P231 has 			
Do not allow contact with air.	Manufacturer/supplier to specify appropriate media.	already been assigned			
 Optional unless emphasis of the hazard statement is desired P280 Wear protective gloves/protective 	 if water increases risk. Highly recommended if specific extinction media are required or appropriate, e.g. if water is ineffective or if water increases risk 	★ Highly recommended for inclusion in the Safety Data Sheet			
clothing/eye protection/ face protection. Manufacturer/supplier to specify type of equipment.					
 specify protective gloves and eye/face protection. 					
★ Highly recommended					

P231 (add)		
Handle under inert gas.		
★ Recommended, unless P422 has already been assigned		
★ Highly recommended for inclusion in the Safety Data Sheet		

7.3.2.10 Pyrophoric Solids

Hazard	category
1	

Signal word Danger

Hazard statement

H250 Catches fire spontaneously if exposed to air



Precautionary Statements					
Prevention	Response	Storage	Disposal		
P210	P335 + P334	P422			
 Keep away from heat/sparks/open flames/hot surfaces. – No smoking. Manufacturer/supplier to specify applicable ignition source(s). ★ Highly recommended P222 Do not allow contact with air. ★ Optional unless emphasis of the hazard statement is desired P280 Wear protective gloves/protective clothing/eye protection/ face protection. Manufacturer/supplier to specify type of equipment. <i>specify protective gloves and eye/face protection.</i> ★ Highly recommended P231 (add) 	Immerse in cool water/wrap in wet bandages. Highly recommended P370 + P378 In case of fire: Use for extinction. Manufacturer/supplier to specify appropriate media. - <i>if water increases risk.</i> Highly recommended if specific extinction media are required or appropriate, e.g. if water is ineffective or if water increases risk	 Store contents under Manufacturer/supplier to specify appropriate liquid or inert gas. Recommended if a specific inert gas or liquid is required, unless P231 has already been assigned Highly recommended for inclusion in the Safety Data Sheet 			

Ha	andle under inert gas.		
*	Recommended, unless P422 has already been assigned		
*	Highly recommended for inclusion in the Safety Data Sheet		

7.3.2.11 Self-Heating Substances and Mixtures

Hazard category	
1	
2	

Signal word Danger Warning Hazard statementH251 Self-heating; may catch fireH252 Self-heating in large quantities; may catch fire



Precautionary Statements			
Prevention	Response	Storage	Disposal
P235 + P410		P407	
Keep cool. Protect from sunlight.		Maintain air gap between stacks/pallets.	
★ Highly recommended for the general		★ Highly recommended	
public		P413	
★ Optional for industrial/professional users if P413 has already been assigned		Store bulk masses greater than kg/lbs at temperatures not exceedingº C /º F.	
P280		Manufacturer/supplier to specify mass and temperature.	
Wear protective gloves/protective clothing/eye protection/ face protection.		 Highly recommended if the manufacturer has specific information 	
Manufacturer/supplier to specify type of equipment.		P420	
- specify protective gloves and eye/face		Store away from other materials.	
protection.		★ Recommended where incompatible materials are	
★ Optional		likely to produce a particular risk. If this statement is used, text clarifying the incompatible materials should be added as supplemental information	
		★ Optional where P220 has already been assigned	

7.3.2.12 Substances and mixtures which, in contact with water, emit flammable gases

Hazard category	Signal word	Hazard statement	
1	Danger	I260 In contact with water releases flammab ignite spontaneously	le gases, which may
2	Danger	261 In contact with water releases flammab	le gas

Precautionary Statements					
Prevention	Response	Storage	Disposal		
P223	P335 + P334	P402 + P404	P501		
 Keep away from any possible contact with water, because of violent reaction and possible flash fire. * Optional unless emphasis of the hazard statement 	Brush off loose particles from skin. Immerse in cool water/wrap in wet	 Store in a dry place. Store in a closed container. * Recommended, unless 	Dispose of contents/container to in accordance with local/regional/national/international		
is desired P231 + P232	 bandages. Highly recommended but do not use the phrase 	P231 has already been assigned	regulations (to be specified).Highly recommended for the		
Handle under inert gas. Protect from moisture.	"wrap in wet bandages"	 Highly recommended for inclusion in the Safety Data 	general public if the substance / mixture is subject to legislation on		
 Highly recommended for substances and mixtures which react readily with moisture in air, where special emphasis is required 	P370 + P378 In case of fire: Use for extinction.	Sheet	hazardous waste. It is recommended to specify the site of disposal while a reference to the applicable legislation is not		
 P280 Wear protective gloves/protective clothing/eye protection/ face protection. Manufacturer/supplier to specify type of equipment. specify protective gloves and eye/face protection. 	 Manufacturer/supplier to specify appropriate media. <i>if water increases risk.</i> Highly recommended if specific extinction media 		 Recommended for inclusion in the Safety Data Sheet if there are specific disposal requirements above the normal expectation for the disposal of chemicals. Specify 		
★ Recommended	are required or appropriate		the applicable regulation.		

7.3.2.12 Substances and mixtures which, in contact with water, emit flammable gases

Hazard category 3 Signal word

Warning

Hazard statement

Precautionary Statements			
Prevention	Response	Storage	Disposal
P231 + P232	P370 + P378	P402 + P404	P501
Handle under inert gas. Protect from moisture.	In case of fire: Use for extinction.	Store in a dry place. Store in a closed container.	Dispose of contents/container to
 Highly recommended for substances and mixtures which react readily 	Manufacturer/supplier to specify appropriate media.	★ Recommended, unless P231 has already been assigned	in accordance with local/regional/national/international
with moisture in air, where special emphasis is required P280 Wear protective gloves/protective clothing/eye protection/face protection. Manufacturer/supplier to specify type of equipment. - specify protective gloves and	 if water increases risk. Highly recommended if specific extinction media are required or appropriate 	★ Highly recommended for inclusion in the Safety Data Sheet	 regulations (to be specified). Highly recommended for the general public if the substance / mixture is subject to legislation on hazardous waste. It is recommended to specify the site of disposal while a reference to the applicable legislation is not necessary.
 specify protective gloves and eye/face protection. Recommended 			★ Recommended for inclusion in the Safety Data Sheet if there are specific disposal requirements above the normal expectation for the disposal of chemicals. Specify the applicable regulation.

H261 In contact with water releases flammable gas

7.3.2.13 Oxidising Liquids

Hazard	category
1	

Signal word Danger Hazard statement

H271 May cause fire or explosion; strong oxidizer



Precautionary Statements			
Prevention	Response	Storage	Disposal
P210	P306 + P360		P501
Keep away from heat.	IF ON CLOTHING: Rinse		Dispose of contents/container to
★ Highly recommended	immediately contaminated clothing and skin with plenty of water		in accordance with local/regional/national/international
P220	before removing clothes.		regulations (to be specified).
Keep/Store away from clothing// combustible	★ Recommended		★ Highly recommended for the general
materials.	P371 + P380 + P375		public if the substance / mixture is
Manufacturer/supplier to specify incompatible materials.	In case of major fire and large quantities: Evacuate area. Fight fire		subject to legislation on hazardous waste. It is recommended to specify the
 specify to keep away from clothing as well as other incompatible materials. 	remotely due to the risk of explosion.		site of disposal while a reference to the applicable legislation is not necessary.
★ Optional where P221 has already been assigned	★ Highly recommended		★ Recommended for inclusion in the Safety Data Sheet if there are specific
★ Highly recommended for inclusion in the Safety	P370 + P378		disposal requirements above the normal
Data Sheet P221	In case of fire: Use for extinction.		expectation for the disposal of chemicals
Take any precaution to avoid mixing with combustibles/	Manufacturer/supplier to specify appropriate media.		
	- if water increases risk.		

Precautionary Statements			
Prevention	Response	Storage	Disposal
Manufacturer/supplier to specify incompatible materials.	★ Highly recommended if specific extinction media are required or		
★ Highly recommended	appropriate, e.g. if water is ineffective or if water increases		
P280	risk		
Wear protective gloves/protective clothing/eye protection/ face protection.			
Manufacturer/supplier to specify type of equipment.			
- specify protective gloves and eye/face protection.			
★ Recommended			
P283			
Wear fire/flame resistant/retardant clothing.			
★ Recommended for inclusion in the Safety Data Sheet			

7.3.2.13 Oxidising Liquids

Hazard category	Signal word	Hazard statement
2	Danger	H272 May intensify fire; oxidizer
3	Warning	H272 May intensify fire; oxidizer



Precautionary Statements			
Prevention	Response	Storage	Disposal
P210	P370 + P378		P501
Keep away from heat.	In case of fire: Use for		Dispose of contents/container to
★ Highly recommended	extinction.		in accordance with
P220	Manufacturer/supplier to specify appropriate media.		local/regional/national/international regulations (to be specified).
Keep/Store away from clothing// combustible materials.	- if water increases risk.		 Highly recommended for the general public if the substance / mixture is
Manufacturer/supplier to specify incompatible materials.	 Highly recommended if specific extinction media are required or appropriate on a if water is 		subject to legislation on hazardous waste. It is recommended to specify the
 Optional where P221 has already been assigned 	appropriate, e.g. if water is ineffective or if water increases risk		site of disposal while a reference to the applicable legislation is not necessary.
 Highly recommended for inclusion in the Safety Data Sheet 			★ Recommended for inclusion in the Safety Data Sheet if there are specific disposal requirements above the normal
P221			expectation for the disposal of chemicals. Specify the applicable
Take any precaution to avoid mixing with combustibles/			regulation.
Manufacturer/supplier to specify incompatible			

Precautionary Statements			
Prevention	Response	Storage	Disposal
materials.			
★ Highly recommended			
P280			
Wear protective gloves/protective clothing/eye protection/ face protection.			
Manufacturer/supplier to specify type of equipment.			
- specify protective gloves and eye/face protection.			
* Recommended			

7.3.2.14 Oxidising Solids

Hazard category

Signal word Danger Hazard statement

H271 May cause fire or explosion; strong oxidizer

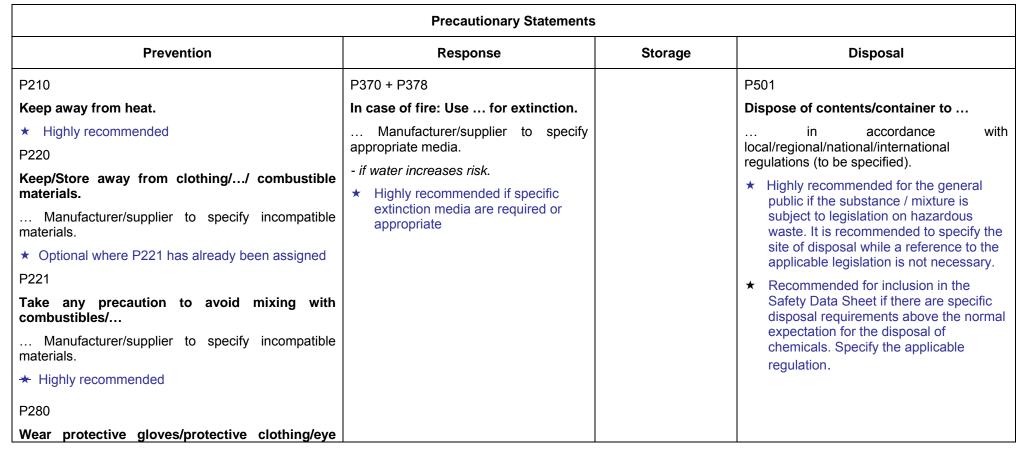


	Precautionary Statements	5	
Prevention	Response	Storage	Disposal
P210	P306 + P360		P501
Keep away from heat.	IF ON CLOTHING: Rinse immediately		Dispose of contents/container to
Highly recommendedP220	contaminated clothing and skin with plenty of water before removing clothes.		in accordance with local/regional/national/international regulations (to be specified).
Keep/Store away from clothing// combustible materials.	 ★ Recommended P371 + P380 + P375 		 Highly recommended for the general public if the substance / mixture is
Manufacturer/supplier to specify incompatible materials.	In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.		subject to legislation on hazardous waste. It is recommended to specify the site of disposal while a reference
 specify to keep away from clothing as well as other incompatible materials. 	 ★ Highly recommended 		to the applicable legislation is not necessary.
 Optional where P221 has already been assigned 	P370 + P378		★ Recommended for inclusion in the Safety Data Sheet if there are specific
 Highly recommended for inclusion in the 	In case of fire: Use for extinction.		disposal requirements above the
Safety Data Sheet	Manufacturer/supplier to specify appropriate media.		normal expectation for the disposal of chemicals. Specify the applicable
P221	- if water increases risk.		regulation.
Take any precaution to avoid mixing with combustibles/	★ Highly recommended if specific extinction media are required or		
Manufacturer/supplier to specify incompatible	appropriate, e.g. if water is ineffective		

Precautionary Statements			
Prevention	Response	Storage	Disposal
materials.	or if water increases risk		
★ Highly recommended			
P280			
Wear protective gloves/protective clothing/eye protection/ face protection.			
Manufacturer/supplier to specify type of equipment.			
 specify protective gloves and eye/face protection. 			
★ Recommended			
P283			
Wear fire/flame resistant/retardant clothing.			
* Recommended			
P283			
Wear fire/flame resistant/retardant clothing.			
★ Recommended for inclusion in the Safety Data Sheet			

7.3.2.14 Oxidising Solids

Hazard category	Signal word	Hazard statement
2	Danger	H272 May intensify fire; oxidizer
3	Warning	H272 May intensify fire; oxidizer



protection/ face protection.		
Manufacturer/supplier to specify type of equipment.		
- specify protective gloves and eye/face protection.		
* Recommended		

7.3.2.15 Organic Peroxides

Hazard	category
Туре А	

Signal word Danger Hazard statement

H240 Heating may cause an explosion



Precautionary Statements					
Prevention	Response	Storage	Disposal		
P210	P370 + P380 (add)	P411 + P235	P501		
Keep away from heat/sparks/open flames/hot surfaces. – No smoking. Manufacturer/supplier to specify applicable	In case of fire: Evacuate area. ★ Highly recommended	Store at temperatures not exceeding ^o C / ^o F. Keep cool. Manufacturer/supplier to specify	Dispose of contents/container to in accordance with local/regional/national/international		
ignition source(s). Highly recommended		temperature. ★ P411: Highly recommended if SADT ≤	regulations (to be specified). ★ Recommended for inclusion in the		
P220		50 °C or if otherwise deemed necessary, in combination with P403	Safety Data Sheet if there are specific disposal requirements above the normal expectation for the disposal of chemicals. Specify		
Keep/Store away from clothing// combustible materials.		★ P235: Highly recommended for other cases, in combination with P403			
Manufacturer/supplier to specify other incompatible materials.		P403 (add)	the applicable regulation.		
* Recommended		Store in a well-ventilated place.			
 Highly recommended for inclusion in the Safety Data Sheet 		★ Highly recommended, in combination with P411 or P235			
		P410			
P234		Protect from sunlight.			
Keep only in original container.		★ Optional if P411 or P235 has already			
★ Highly recommended where the container is important for preventing or		been assigned			

suppressing the effect of dangerous	P420	
reactions or explosion	Store away from other materials.	
P280	★ Recommended where incompatible	
Wear protective gloves/protective clothing/eye protection/ face protection.	materials are likely to produce a particular risk. If this statement is used,	
Manufacturer/supplier to specify type of equipment.	text clarifying the incompatible materials should be added as supplemental information	
 specify protective gloves and eye/face protection. 	★ Optional where P220 has already been assigned	
★ Highly recommended		

7.3.2.15 Organic Peroxides

Hazard	category
Туре В	

Signal word Danger

Hazard statement0

H241 Heating may cause a fire or explosion



Precautionary Statements					
Prevention	Response	Storage	Disposal		
P210	P370 + P380 + P375 (add)	P411 + P235	P501		
Keep away from heat/sparks/open flames/hot surfaces. – No smoking. Manufacturer/supplier to specify applicable	In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion.	Store at temperatures not exceeding ^o C / ^o F. Keep cool. Manufacturer/supplier to specify	Dispose of contents/container to in accordance with local/regional/national/international		
ignition source(s).	★ Highly recommended	temperature.	regulations (to be specified).		
★ Highly recommended	P370 + P378 (add)	 ★ P411: Highly recommended if SADT ≤ 50 °C or if otherwise 	 Highly recommended for the general public if the substance / 		
P220 Keep/Store away from clothing// combustible materials.	In case of fire: Use for extinction. Manufacturer/supplier to	 deemed necessary, in combination with P403 P235: Highly recommended for 	mixture is subject to legislation on hazardous waste. It is recommended to specify the site		
Manufacturer/supplier to specify other incompatible materials.		other cases, in combination with	of disposal while a reference to the applicable legislation is not necessary.		
* Recommended	★ Highly recommended if appeific extinction modia	P403 (add)	★ Recommended for inclusion in the		
P234	specific extinction media are required or appropriate,	Store in a well-ventilated place.	Safety Data Sheet if there are specific disposal requirements		
Keep only in original container.	e.g. if water is ineffective or if water increases risk	 Highly recommended, in combination with P411 or P235 	above the normal expectation for the disposal of chemicals. Specify		
★ Highly recommended		P410	the applicable regulation.		
P280		Protect from sunlight.			
Wear protective gloves/protective		★ Optional if P411 or P235 has			

clothing/eye protection/ face protection.	already been assigned	
Manufacturer/supplier to specify type of	P420	
equipment.	Store away from other materials.	
 specify protective gloves and eye/face protection. Highly recommended 	★ Recommended where incompatible materials are likely to produce a particular risk. If this statement is used, text clarifying the incompatible materials should be added as supplemental information	
	★ Optional where P220 has already been assigned	

1 7.3.2.15 Organic Peroxides

2	Hazard category	Signal word	Hazard statement		
3	Туре С	Danger	H242 Heating may cause a fire		
4	Туре D	Danger	H242 Heating may cause a fire		
5	Туре Е	Warning	H242 Heating may cause a fire		
6	Туре F	Warning	H242 Heating may cause a fire		



Precautionary Statements			
Prevention	Response	Storage	Disposal
P210	P370 + P378 (add)	P411 + P235	P501
Keep away from heat/sparks/open flames/hot surfaces. – No smoking.	In case of fire: Use for extinction.	Store at temperatures not exceedingº C /º F. Keep cool.	Dispose of contents/container to
Manufacturer/supplier to specify applicable ignition source(s).	Manufacturer/supplier to specify appropriate media.	Manufacturer/supplier to specify temperature.	local/regional/national/international regulations (to be specified).
 ★ Highly recommended P220 Keep/Store away from clothing// combustible materials. Manufacturer/supplier to specify other incompatible materials. 	 if water increases risk. Highly recommended if specific extinction media are required or appropriate, e.g. if water is ineffective or if water increases risk 	 ★ P411: Highly recommended if SADT ≤ 50 °C or if otherwise deemed necessary, in combination with P403 ★ P235: Highly recommended for other cases, in combination with P403 	 Highly recommended for the general public if the substance / mixture is subject to legislation on hazardous waste. It is recommended to specify the site of disposal while a reference to the applicable legislation is not necessary.
 Recommended P234 Keep only in original container. Highly recommended 		 P403 (add) Store in a well-ventilated place. * Highly recommended, in combination with P411 or P235 	★ Recommended for inclusion in the Safety Data Sheet if there are specific disposal requirements above the normal expectation for the disposal of chemicals. Specify the applicable regulation.

	Prec	autionary Statements	
Prevention	Response	Storage Disposal	
P280		P410	
Wear protective gloves/protective clothing/eye protection/ face protection.		Protect from sunlight.	
Manufacturer/supplier to specify type of equipment.		 ★ Optional if P411 or P235 has already been assigned P420 	
 specify protective gloves and eye/face protection. 		Store away from other materials.	
★ Highly recommended		★ Recommended where incompatible materials are likely to produce a particular risk. If this statement is used, text clarifying the incompatible materials should be added as supplemental information	
		★ Optional where P220 has already been assigned	

7.3.2.16 Corrosive to Metals

Hazard	category
1	

Signal word Warning Hazard statement H290 May be corrosive to metals



	Precautionary Statements		
Prevention	Response	Storage	Disposal
P234	P390	P406	
 Keep only in original container. Recommended for the general public Optional for industrial / professional users Recommended for inclusion in the Safety Data Sheet 	 Absorb spillage to prevent material damage. ★ Recommended 	 Store in a corrosive resistant/ container with a resistant inner liner. Manufacturer/supplier to specify other compatible materials. * Optional * Do not use if P234 has already been assigned 	

7.3.3 Specific Precautionary Statements for Health Hazards

7.3.3.1 Acute Toxicity - Oral

Hazard category	Signal word	Hazard statement	
1	Danger	H300 Fatal if swallowed	
2	Danger	H300 Fatal if swallowed	
3	Danger	H301 Toxic if swallowed	



	Precautionary Statement	S	
Prevention	Response	Storage	Disposal
P264	P301 + P310	P405	P501
Wash thoroughly after handling.	IF SWALLOWED: Immediately call a	Store locked up.	Dispose of contents/container
Manufacturer / supplier to specify parts of	POISON Center or doctor/physician.	★ Highly recommended	to in accordance with
 the body to be washed after handling. Highly recommended for the general 	 Highly recommended P321 	for the general public	local/regional/national/international
public	Specific treatment (see on this label).	professional users unless other	regulations (to be specified).
 Recommended for industrial / professional users unless P280 has already been assigned 	Reference to supplemental first aid instruction.	considerations deem it necessary	 Highly recommended for the general public if the substance / mixture is subject to
P270	- if immediate administration of antidote is required.		legislation on hazardous waste. It is recommended to
Do not eat, drink or smoke when using this product.	 Highly recommended only in exceptional cases where specific 		specify the site of disposal while a reference to the applicable legislation is not
 Highly recommended for the general public for categories 1 and 2 	treatment, including the administration of an antidote, is urgently required		necessary. ★ Recommended for industrial /
 Recommended for the general public 	P330		professional users if there are specific disposal requirements

	Precautionary Statements			
Prevention	Response	Storage	Disposal	
 for category 3 ★ Optional for industrial / professional users ★ Recommended for inclusion in the Safety Data Sheet 	 Rinse mouth. ★ Highly recommended for the general public for categories 1 and 2 unless P301+P330+P331 has already been assigned ★ Recommended for the general public for category 3 unless P301+P330+P331 has already been assigned ★ Recommended for industrial / professional users for categories 1 and 2 unless P301+P330+P331 has already been assigned ★ Optional for industrial / professional users for category 3 		above the normal expectation for the disposal of chemicals. It is recommended to specify the site of disposal while a reference to the applicable legislation is not necessary.	

Signal word Hazard statement



7.3.3.1 Acute Toxicity - Oral

Hazard category

4	Warning	H302 Harmful if swallow	wed	
		Precautionary Stateme	ents	
	Prevention	Response	Storage	Disposal
P264		P301 + P312		P501
Wash t	horoughly after handling.	IF SWALLOWED: Call a POISON Center		Dispose of contents/container to
Manufactu	irer/supplier to specify parts of	or doctor/physician if you feel unwell.		in accordance with
the body to	o be washed after handling.	★ Optional		local/regional/national/international
* Recon	nmended for the general public	P330		regulations (to be specified)
★ Option	nal for industrial / professional	Rinse mouth.		 Highly recommended for the general public if the substance / mixture is
users		★ Optional		subject to legislation on hazardous
P270				waste. It is recommended to specify
Do not ea this produ	at, drink or smoke when using uct.			the site of disposal while a reference to the applicable legislation is not necessary.
★ Recon	nmended for the general public			★ Recommended for industrial /
★ Option users	nal for industrial / professional			professional users if there are specific disposal requirements above the
	nmended for inclusion in the / Data Sheet			normal expectation for the disposal of chemicals. It is recommended to specify the site of disposal while a reference to the applicable legislation is not necessary.

7.3.3.1 Acute Toxicity - Dermal

Hazard category	Signal word	Hazard statement
1	Danger	H310 Fatal in contact with skin
2	Danger	H310 Fatal in contact with skin



Precautionary Statements				
Prevention	Response	Storage	Disposal	
P262	P302 + P350	P405	P501	
Do not get in eyes, on skin, or on clothing.	IF ON SKIN: Gently wash with	Store locked up.	Dispose of contents/container to	
★ Highly recommended unless P280 has already been assigned	 plenty of soap and water Recommended for the general 	 Highly recommended for the general public 	in accordance with local/regional/national/international	
P264	public	★ Optional for industrial /	regulations (to be specified).	
Wash thoroughly after handling.	★ Recommended for inclusion in the Safety Data Sheet	professional users unless other	 Highly recommended for the general public if the substance / 	
Manufacturer / supplier to specify parts of the body to be washed after handling.	P310	considerations deem it necessary	mixture is subject to legislation on hazardous waste. It is recommended to specify the site of disposal while a reference to	
★ Highly recommended for the general public	Immediately call a POISON CENTER or doctor/physician.			
 Highly recommended for industrial / professional users unless P280 has already been assigned 	+ Highly recommended in	the applicable legislation is not necessary.		
	P322		★ Recommended for inclusion in the Safety Data Sheet if there are	
P270	Specific measures (see on this		specific disposal requirements	
Do not eat, drink or smoke when using this	label).		above the normal expectation for	
product.	Reference to supplemental first aid		the disposal of chemicals. Specify the applicable regulation.	
★ Highly recommended for the general public	instruction.		the applicable regulation.	
★ Optional for industrial / professional users.	- if immediate measures such as			
★ Recommended for inclusion in the Safety Data	specific cleansing agent is advised.			

Sheet P280
Wear protective gloves/protective clothing/eye protection/face protection. Manufacturer/supplier to specify type of equipment.
 Specify protective gloves/clothing. Highly recommended



7.3.3.1 Acute Toxicity - Dermal

Hazard category	
3	

Danger

Signal word

Hazard statement

H311 Toxic in contact with skin

Precautionary Statements			
Prevention	Response	Storage	Disposal
P280	P302 + P352	P405	P501
 Wear protective gloves / protective clothing / eye protection / face protection. Manufacturer/supplier to specify type of equipment. Specify protective gloves/clothing. * Highly recommended 	 IF ON SKIN: Wash with plenty of soap and water Recommended for the general public Recommended for inclusion in the Safety Data Sheet P312 Call a POISON CENTER or doctor/physician if you feel unwell. Recommended unless P310, P311 or P313 has already been assigned P322 Specific measures (see on this label). Reference to supplemental first aid instruction. <i>if measures such as specific cleansing agent is advised.</i> Highly recommended only in exceptional cases where specific measures are required 	 Store locked up. Highly recommended for the general public Optional for industrial / professional users unless other considerations deem it necessary 	 Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified). Highly recommended for the general public if the substance / mixture is subject to legislation on hazardous waste. It is recommended to specify the site of disposal while a reference to the applicable legislation is not necessary. Recommended for industrial / professional users if there are specific disposal requirements above the normal expectation for the disposal of chemicals. It is recommended to specify the site of disposal while a reference to the applicable legislation is not necessary.

P361
Remove/Take off immediately all contaminated clothing.
★ Recommended, unless P280 has already been assigned
P363
Wash contaminated clothing before reuse.
★ Optional

Signal word



7.3.3.1 Acute Toxicity - Dermal

Hazard category

4 Warnir	H312 Harmful in contact with	h skin			
	Precautionary Statements				
Prevention	Response	Storage	Disposal		
P280	P302 + P352		P501		
Wear protective gloves / protective	IF ON SKIN: Wash with plenty of soap and water		Dispose of contents/container to		
clothing / eye protection / face protection.	★ Optional		in accordance with		
Manufacturer/supplier to specify type of	P312		local/regional/national/international regulations (to be specified).		
equipment.	Call a POISON CENTER or doctor/physician if you feel unwell.		★ Highly recommended for the general		
- Specify protective gloves/clothing.			public if the substance / mixture is subject to legislation on hazardous		
★ Recommended	★ Recommended unless P310, P311 or P313 has already been assigned		waste. It is recommended to specify		
	P322		the site of disposal while a reference to the applicable		
	Specific measures (see on this label).		legislation is not necessary.		
	Reference to supplemental first aid instruction.		* Recommended for industrial /		
	- if measures such as specific cleansing agent is advised.		professional users if there are specific disposal requirements above the normal expectation for		
	★ Highly recommended only in exceptional cases where specific measures are required		the disposal of chemicals. It is recommended to specify the site of		
	P363		disposal while a reference to the applicable legislation is not		
	Wash contaminated clothing before reuse.		necessary.		
	★ Optional				

Hazard statement

Signal word

Danger

Danger

7.3.3.1 Acute Toxicity - Inhalation

Hazard category

1 2



Precautionary Statements				
Prevention	Response	Storage	Disposal	
P260	P304 + P340	P403 + P233	P501	
Do not breathe dust/fume/gas/mist/vapours/spray.	IF INHALED: Remove victim to fresh air and keep at rest in a position	Store in a well-ventilated place. Keep container tightly closed.	Dispose of contents/container to	
Manufacturer/supplier to specify applicable conditions.	comfortable for breathing.★ Highly recommended	- if product is volatile so as to generate hazardous atmosphere.	in accordance with local/regional/national/internation	
★ Highly recommended where the substance / mixture is highly volatile or a gas or where exposure via inhalation is possible, e.g.	P310 Immediately call a POISON CENTER	★ Highly recommended where exposure via inhalation is possible, unless P404 has	 al regulations (to be specified). ★ Highly recommended for the general public if the 	
through spraying or inhalable dust P271	 or doctor/physician. ★ Highly recommended, in combination with P304+P340 	already been assigned P405	substance / mixture is subject to legislation on hazardous waste. It is recommended to	
Use only outdoors or in a well-ventilated area.	P320	Store locked up.Highly recommended for the	specify the site of disposal while a reference to the	
★ Highly recommended for the general public	Specific treatment is urgent (see on this label)	general public	applicable legislation is not necessary.	
 ★ Optional for industrial/professional users P284 	Reference to supplemental first aid instruction.	★ Optional for industrial / professional users unless other considerations deem it	★ Recommended for industrial / professional users if there are apasitie diagonal	
Wear respiratory protection.	- if immediate administration of	necessary	specific disposal requirements above the	
 Manufacturer/supplier to specify equipment. * Recommended where the substance / mixture is highly volatile or a gas or where 	 antidote is required Highly recommended only in exceptional cases where specific 		normal expectation for the disposal of chemicals. It is recommended to specify the	

Hazard statement

H330 Fatal if inhaled

H330 Fatal if inhaled

exposure via inhalation is possible, e.g. through spraying or inhalable dusttreatment, including the administration of an antidote, is urgently required	site of disposal while a reference to the applicable legislation is not necessary.
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7.3.3.1 Acute Toxicity - Inhalation

Hazard category	Signal word	Hazard statement		
3	Danger	H331 Toxic if inhaled		
		Precautionary State	ements	
Prevention	1	Response	Storage	Disposal
P261		P304 + P340	P403 + P233	P501
Avoid breathing dust/fume vapours/spray. Manufacturer/supplier to sp conditions.	-	 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. * Recommended 	 Store in a well-ventilated place. Keep container tightly closed. <i>if product is volatile so as to generate hazardous atmosphere.</i> 	Dispose of contents/container toinaccordancewithlocal/regional/national/internationalregulations (to be specified).
 Recommended where the mixture is highly volatile where exposure via inhal possible, e.g. through sp inhalable dust, unless P2 been assigned, 	or a gas or llation is praying or	P311 Call a POISON CENTER or doctor/physician. ★ Recommended, in combination with P304+P340	 Highly recommended where exposure via inhalation is possible, unless P404 has already been assigned P405 	 Highly recommended for the general public if the substance / mixture is subject to legislation on hazardous waste. It is recommended to specify the site of disposal while a reference to the applicable legislation is part
 P271 Use only outdoors or in a area. * Highly recommended for public 		 P321 Specific treatment (see on this label) Reference to supplemental first aid instruction. <i>if immediate specific measures are</i> 	 Store locked up. Highly recommended for the general public Optional for industrial / professional users unless other considerations deem it 	 applicable legislation is not necessary. Recommended for industrial / professional users if there are specific disposal requirements above the normal expectation for
★ Optional for industrial/pro	fessional users	 In inimediate specific measures are required Highly recommended only in exceptional cases where specific treatment, including the administration of an antidote, is urgently required 	necessary	the disposal of chemicals. It is recommended to specify the site of disposal while a reference to the applicable legislation is not necessary.

7.3.3.1 Acute Toxicity - Inhalation

Hazard category	
4	

Warning

Signal word

Hazard statement H332 Harmful if inhaled



Precautionary Statements				
Prevention Response Storage Disposal				
P261 Avoid breathing dust/fume/gas/mist/ vapours/spray. Manufacturer/supplier to specify applicable conditions.	P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.			
 Recommended where the substance / mixture is highly volatile or a gas or where exposure via inhalation is possible, e.g. through spraying or inhalable dust, unless P260 has already been assigned P271 	 P312 Call a POISON CENTER or doctor/physician if you feel unwell. * Recommended, unless P310, P311or P313 has already been assigned 			
Use only outdoors or in a well-ventilated area. Highly recommended for the general				
 A highly recommended for the general public Optional for industrial/professional users 				

7.3.3.2 Skin Corrosion / Irritation

Hazard	category
1A, 1B,	1C

Danger

Signal word

Hazard statement

H314 Causes severe skin burns and eye damage



Precautionary Statements			
Prevention	Response	Storage	Disposal
P260	P301 + P330 + P331	P405	P501
Do not breathe dust/fume/gas/mist/ vapours/spray.	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.	Store locked up. ★ Highly recommended for	Dispose of contents/container to
Manufacturer/supplier to specify applicable conditions.	 Highly recommended for the general public, provided that medical advice 	 A finging resonance for the general public Optional for industrial / 	in accordance with local/regional/national/international
- specify do not breathe dusts or mists. - If inhalable particles of dusts or mists	 indicates that the statement is appropriate Recommended for industrial / 	professional users unless other considerations	regulations (to be specified).★ Highly recommended for the
 <i>may occur during use.</i> <i>★</i> Highly recommended where the 	professional users P303 + P361 + P353	deem it necessary	general public if the substance / mixture is subject to legislation on hazardous waste. It is
substance / mixture is highly volatile or a gas or where exposure via inhalation is possible, e.g. through spraying or inhalable dust	IF ON SKIN (or hair): Remove / Take off immediately all contaminated clothing. Rinse skin with water / shower.		recommended to specify the site of disposal while a reference to the applicable legislation is not necessary.
P264	★ Highly recommended		★ Recommended for industrial /
Wash thoroughly after handling.	P363		professional users if there are specific disposal requirements
Manufacturer/supplier to specify parts of the body to be washed after handling.	 Wash contaminated clothing before reuse. Recommended for the general public 		above the normal expectation for the disposal of chemicals. It
★ Highly recommended for the general public, unless P280 has already	 Recommended for inclusion in the Safety Data Sheet 		is recommended to specify the site of disposal while a reference to the applicable

Precautionary Statements			
Prevention	Response	Storage	Disposal
been assigned	P304 + P340		legislation is not necessary.
 Highly recommended for industrial / professional users, unless P280 has already been assigned P280 	If INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.		
Wear protective gloves / protective	★ Optional		
clothing / eye protection / face	P310		
protection. Manufacturer/supplier to specify type of	Immediately call a POISON Center or doctor/physician.		
equipment. - Specify protective gloves/clothing and	★ Highly recommended, in combination with P303+P361+P353, P305+P351+P338 or		
eye/face protection.	P301 + P330 + P331		
★ Highly recommended	P321		
	Specific treatment (see on this label).		
	Reference to supplemental first aid instruction.		
	 Manufacturer/supplier may specify a cleansing agent if appropriate 		
	 Highly recommended only in exceptional cases where specific treatment, including the administration of an antidote, is urgently required 		
	P305 + P351 + P338		
	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if		

Precautionary Statements			
Prevention	Disposal		
present and easy to do. Continue rinsing.			
	★ Highly recommended		



7.3.3.2 Skin Corrosion / Irritation

Hazard category	Signal word	Hazard statement	
2	Warning	H315 Causes skin irritation	

Precautionary Statements					
Prevention	Response	Storage	Disposal		
P264	P302 + P352				
Wash thoroughly after handling.	IF ON SKIN: Wash with plenty of soap and water.				
Manufacturer/supplier to specify	★ Optional for the general public				
parts of the body to be washed after handling.	★ Recommended for inclusion in the Safety Data Sheet				
★ Optional	P321				
P280	Specific treatment (see on this label).				
Wear protective gloves/protective	Reference to supplemental first aid instruction.				
clothing/eye protection/face	- Manufacturer/supplier may specify a cleansing agent if appropriate				
protection. Manufacturer/supplier to specify type of	 Highly recommended only in exceptional cases where specific treatment, including the administration of an antidote, is urgently required 				
equipment.	P332 + P313				
- Specify protective gloves.	If skin irritation occurs: Get medical advice / attention.				
★ Recommended	★ Optional				
	P362				
	Take off contaminated clothing and wash before reuse.				
	* Optional				
	★ Recommended for inclusion in the Safety Data Sheet				

7.3.3.3 Eye Damage / Eye Irritation

Hazard	category
1	

Signal word

Danger

Hazard statement H318 Causes serious eye damage



Precautionary Statements				
Prevention	Response	Storage	Disposal	
 P280 Wear protective gloves/protective clothing/eye protection/face protection. Manufacturer/supplier to specify type of equipment. - Specify eye/face protection. ★ Highly recommended 	for several minutes. Remove contact			

7.3.3.3 Eye Damage / Eye Irritation

Hazard	category
2	

Signal word Warning Hazard statement H319 Causes serious eye irritation



Precautionary Statements					
Prevention Response Storage Disposal					
P280	P305 + P351 + P338				
Wear protective gloves/protective clothing/eye protection/face protection.	for several minutes. Remove contact				
Manufacturer/supplier to specify type of equipment.	lenses, if present and easy to do. Continue rinsing.				
- Specify eye/face protection.	★ Recommended for the general public				
* Recommended	 Recommended for inclusion in the Safety Data Sheet 				
P264	P337 + P313				
Wash thoroughly after handling.	If eye irritation persists: Get medical				
Manufacturer / supplier to specify parts	advice/attention.				
of the body to be washed after handling.	★ Recommended				
★ Optional					

7.3.3.4 Sensitisation - Respiratory

Hazard category
1, 1A, 1B

Signal word Danger

Hazard statement

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled



Precautionary Statements					
Prevention Response Storage Disposal					
P261	P304 + P341		P501		
 Avoid breathing dust/fume/gas/mist/vapours/spray. Manufacturer/supplier to specify applicable conditions. * Highly recommended, unless P260 has already been assigned, where the substance / mixture is highly volatile or a gas or where there is a realistic risk of inhalation, e.g. through spraying or inhalable dust P285 In case of inadequate ventilation wear respiratory protection. Manufacturer/supplier to specify equipment. * Highly recommended, unless P284 has already been assigned, where the substance 	 IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. * Highly recommended, unless P304+P340 has already been assigned P342 + P311 If experiencing respiratory symptoms: Call a POISON CENTER or doctor / physician. * Highly recommended, in combination with P304+P341 		 Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified). * Highly recommended for the general public if the substance / mixture is subject to legislation on hazardous waste. It is recommended to specify the site of disposal while a reference to the applicable legislation is not necessary. * Recommended for industrial / professional users if there are specific disposal requirements above the normal expectation for the disposal of chemicals. It is recommended to specify the site of disposal while a reference to the normal expectation for the disposal of chemicals. It is recommended to specify the site of disposal while a reference to the applicable legislation is not 		

7.3.3.4 Sensitisation - Skin

Hazard category 1, 1A, 1B **Signal word** Danger Hazard statement H317 May cause an allergic skin reaction



Precautionary Statements				
Prevention	Response	Storage	Disposal	
P261	P302 + P352		P501	
Avoid breathing dust/fume/gas/mist/ vapours/spray.	IF ON SKIN: Wash with plenty of soap and water.		Dispose of contents/container to	
Manufacturer/supplier to specify applicable	★ Recommended for the general public		local/regional/national/international	
 conditions. Recommended where the substance / 	★ Recommended for inclusion in the Safety Data Sheet		regulations (to be specified).Highly recommended for the	
mixture is highly volatile or a gas or where exposure via inhalation is possible, e.g. through spraying or inhalable dust, unless P260 has already been assigned	P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.		general public if the substance / mixture is subject to legislation on hazardous waste. It is recommended to specify the site of	
P272	★ Recommended		disposal while a reference to the applicable legislation is not	
Contaminated work clothing should not be allowed out of the workplace.	P321 Specific treatment (see on this label)		necessary.Recommended for industrial /	
★ Not intended to be used for the general public	Reference to supplemental first aid		professional users if there are	
★ Optional for industrial/professional users	instruction.		specific disposal requirements above the normal expectation for	
P280	- Manufacturer/supplier may specify a		the disposal of chemicals. It is	
Wear protective gloves / protective clothing / eye protection / face protection.	 cleansing agent if appropriate. ★ Highly recommended only in exceptional 		recommended to specify the site of disposal while a reference to the applicable legislation is not	
Manufacturer/supplier to specify type of	cases where specific treatment, including the administration of an antidote, is		necessary.	

equi	pment.	urgently required	
- 3	Specify protective gloves.	P363	
* I	Highly recommended	Wash contaminated clothing before reuse.	
		* Recommended	

7.3.3.5 Germ Cell Mutagenicity

Hazard category	Signal word	Hazard statement	
1A and 1B	Danger	H340 May cause genetic defects (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)	
2	Warning	H341 Suspected of causing genetic defects (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)	V

Precautionary Statements				
Prevention	Response	Storage	Disposal	
P201	P308 + P313	P405	P501	
Obtain special instructions before use.	IF exposed or concerned: Get	Store locked up.	Dispose of contents/container to	
 Highly recommended for category 1A and 1B Recommended for category 2 P202 Do not handle until all safety precautions have been read and understood. Optional where P201 has already been assigned P281 	 medical advice / attention. Highly recommended for category 1A and 1B Recommended for category 2 	 ★ Highly recommended for the general public¹² ★ Optional for industrial/professional users unless other considerations deem it necessary 	 in accordance with local/regional/national/international regulations (to be specified). Highly recommended for the general public if the substance / mixture is subject to legislation on hazardous waste. It is recommended to specify the site of disposal while a reference to the applicable legislation is not necessary. 	
Use personal protective equipment as			★ Recommended for industrial /	

¹² Substances and mixtures which are listed in Appendix 1-6 of Annex XVII to Regulation (EC) No 1907/2006 (REACH) and which are assigned H340, H350 or H360 are restricted to industrial / professional users and normally not supplied to the general public (see entry 28, 29 and 30 in Annex XVII to REACH as amended by Commission Regulation (EC) No 552/2009).

required.	professional users if there are
★ Highly recommended to cover certain exposure risks or routes of exposure although P280, P282, P283, P284 or P285 may have been assigned as well	specific disposal requirements above the normal expectation for the disposal of chemicals. It is recommended to specify the site of disposal while a reference to the applicable legislation is not necessary.

7.3.3.6 Carcinogenicity

Hazard category	Signal word	Hazard statement	
1A and 1B	Danger	H350 May cause cancer (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)	
2	Warning	H351 Suspected of causing cancer (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)	

Precautionary Statements				
Prevention	Response	Storage	Disposal	
P201	P308 + P313	P405	P501	
 Obtain special instructions before use. Highly recommended for category 1A and 1B Recommended for category 2 P202 Do not handle until all safety precautions 	 IF exposed or concerned: Get medical advice/attention. * Highly recommended for category 1A and 1B * Recommended for category 2 	 ★ Highly recommended for the general public¹³ ★ Optional for industrial/professional users unless other considerations deem it 	 Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified). * Highly recommended for the general public if the substance / mixture is subject to legislation on hazardous 	
 have been read and understood. Optional where P201 has already been assigned 		necessary	waste. It is recommended to specify the site of disposal while a reference to the applicable legislation is not necessary.	

¹³ Substances and mixtures which are listed in Appendix 1-6 of Annex XVII to Regulation (EC) No 1907/2006 (REACH) and which are assigned H340, H350 or H360 are restricted to industrial / professional users and normally not supplied to the general public (see entry 28, 29 and 30 in Annex XVII to REACH as amended by Commission Regulation (EC) No 552/2009).

P281 Use personal protective equipment as required.		★ Recommended for industrial / professional users if there are specific disposal requirements above the normal expectation for the disposal of
★ Highly recommended to cover certain exposure risks or routes of exposure although P280, P282, P283, P284 or P285 may have been assigned as well		chemicals. It is recommended to specify the site of disposal while a reference to the applicable legislation is not necessary.

7.3.3.7 Reproductive Toxicity

Hazard category	Signal word	Hazard statement	
1A and 1B	Danger	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)	
2	Warning	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)	V

Precautionary Statements				
Prevention	Response	Storage	Disposal	
P201	P308 + P313	P405	P501	
 Obtain special instructions before use. Highly recommended for category 1A and 1B Recommended for category 2 P202 Do not handle until all safety precautions have been read and understood. Optional where P201 has already been 	 IF exposed or concerned: Get medical advice/attention. * Highly recommended for category 1A and 1B * Recommended for category 2 	 Store locked up. Highly recommended for the general public¹⁴ Optional for industrial / professional users unless other considerations deem it necessary 	 Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified). ★ Highly recommended for the general public if the substance / mixture is subject to legislation on hazardous waste. It is recommended to specify the site of disposal while a reference to the applicable legislation is not 	

¹⁴ Substances and mixtures which are listed in Appendix 1-6 of Annex XVII to Regulation (EC) No 1907/2006 (REACH) and which are assigned H340, H350 or H360 are restricted to industrial / professional users and normally not supplied to the general public (see entry 28, 29 and 30 in Annex XVII to REACH as amended by Commission Regulation (EC) No 552/2009).

assigned		necessary.
P281		★ Recommended for industrial /
Use personal protective equipment as required.		professional users if there are specific disposal requirements above the normal expectation for the disposal of
★ Highly recommended to cover certain exposure risks or routes of exposure although P280, P282, P283, P284 or P285 may have been assigned as well		chemicals. It is recommended to specify the site of disposal while a reference to the applicable legislation is not necessary.

7.3.3.7 Reproductive Toxicity

Hazard category	Signal word	Hazard statement
Hazard category for lactation effects	No signal word	H362 May cause harm to breast-fed children

Precautionary Statements			
Prevention	Response	Storage	Disposal
P201	P308 + P313		
 Obtain special instructions before use. ★ Highly recommended P260 	IF exposed or concerned: Get medical advice/attention.* Recommended		
Do not breathe dust/fume/gas/mist/ vapours/spray.			
Manufacturer/supplier to specify applicable conditions.			
- specify do not breathe dusts or mists.			
 If inhalable particles of dusts or mists may occur during use. 			
★ Highly recommended where the substance / mixture is highly volatile or a gas or where exposure via inhalation is possible, e.g. through spraying or inhalable dust			
P263			
Avoid contact during pregnancy/while nursing.			
★ Highly recommended			

Precautionary Statements Prevention Response Storage Disposal P264 Wash ... thoroughly after handling. ... Manufacturer / supplier to specify parts of the body to be washed after handling. ★ Optional P270 Do not eat, drink or smoke when using this product. ★ Recommended for the general public ★ Optional for industrial / professional users ★ Recommended for inclusion in the Safety Data Sheet

7.3.3.8 Specific Target Organ Toxicity (Single Exposure)

Hazard	category
1	

Signal word Danger

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)



Precautionary Statements					
Prevention	Response	Storage	Disposal		
P260	P307 + P311	P405	P501		
Do not breathe dust/fume/gas/mist/	IF exposed: Call a POISON CENTER	Store locked up.	Dispose of contents/container to		
vapours/spray.	or doctor/physician.	★ Highly recommended	in accordance with		
Manufacturer/supplier to specify applicable	★ Highly recommended	for the general public	local/regional/national/international		
conditions.	P321	\star Optional for industrial /	regulations (to be specified).		
 Highly recommended where the substance / mixture is highly volatile or a gas or where exposure via inhalation 	Specific treatment (see on this label)	professional users unless other considerations deem it	 Highly recommended for the general public if the substance / mixture is subject to legislation on hazardous 		
is possible, e.g. through spraying or inhalable dust	Reference to supplemental first aid instruction.	necessary	waste. It is recommended to specify the site of disposal while a reference to the applicable legislation is not necessary.		
P264	- if immediate measures are required.				
Wash thoroughly after handling.	★ Highly recommended only in		 Recommended for industrial / professional users if there are specific 		
Manufacturer / supplier to specify parts of the body to be washed after handling.	exceptional cases where specific treatment, including the administration of an antidote, is		disposal requirements above the norm expectation for the disposal of		
★ Optional	urgently required		chemicals. It is recommended to specify the site of disposal while a reference to		
P270			the applicable legislation is not		
Do not eat, drink or smoke when using this product.			necessary.		

★ Recommended for the general public		
★ Optional for industrial / professional users		
★ Recommended for inclusion in the Safety Data Sheet		

7.3.3.8 Specific Target Organ Toxicity (Single Exposure)

Hazard category	Signal word	Hazard statement	
2	Warning	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)



Precautionary Statements						
Prevention	Response	Storage	Disposal			
P260	P309 + P311	P405	P501			
 Do not breathe dust/fume/gas/mist/ vapours/spray. Manufacturer/supplier to specify applicable conditions. * Highly recommended where the substance / mixture is highly volatile or a gas or where exposure via inhalation is possible, e.g. through spraying or inhalable dust 	 IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician. * Recommended 	 Store locked up. Highly recommended for the general public Optional for industrial / professional users unless other considerations deem it necessary 	 Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified). ★ Highly recommended for the general public if the substance / mixture is subject to legislation on hazardous waste. It is recommended to specify the site of disposal while a reference to the applicable legislation is not 			
 P264 Wash thoroughly after handling. Manufacturer / supplier to specify parts of the body to be washed after handling. ★ Optional P270 Do not eat, drink or smoke when using this product. 			 Recommended for industrial / professional users if there are specific disposal requirements above the normal expectation for the disposal of chemicals. It is recommended to specify the site of disposal while a reference to the applicable legislation is not necessary. 			

★ Recommended for the general public		
★ Optional for industrial / professional users		
★ Recommended for inclusion in the Safety Data Sheet		

7.3.3.8 Specific Target Organ Toxicity (Single Exposure)

Hazard category

3

Signal word

Hazard statement

Warning

H335 May cause respiratory irritation; or H336 May cause drowsiness or dizziness



Precautionary Statements				
Prevention	Response	Storage	Disposal	
P261	P304 + P340	P403 + P233	P501	
Avoid breathing dust/fume/gas/mist/ vapours/spray.	IF INHALED: Remove victim to fresh air and keep at rest in a	Store in a well-ventilated place. Keep container tightly closed.	Dispose of contents/container to	
Manufacturer/supplier to specify applicable conditions.	position comfortable for breathing.* Optional	- if product is volatile so as to generate hazardous atmosphere.	local/regional/national/international regulations (to be specified).	
 Recommended where the substance / mixture is highly volatile or a gas or where exposure via inhalation is possible, e.g. through spraying or inhalable dust, unless P260 has already been assigned, P271 	 P312 Call a POISON CENTER or doctor/ physician if you feel unwell. * Recommended unless P310, P311 or P313 has already been 	 Recommended where exposure via inhalation is possible, unless P404 is already assigned P405 Store locked up. 	 Highly recommended for the general public if the substance / mixture is subject to legislation on hazardous waste. It is recommended to specify the site of disposal while a reference to the applicable legislation is not necessary. 	
 Use only outdoors or in a well-ventilated area. Highly recommended for the general public Optional for industrial / professional users 	assigned	 ★ Highly recommended for the general public ★ Optional for industrial / professional users unless other considerations deem it necessary 	★ Recommended for industrial / professional users if there are specific disposal requirements above the normal expectation for the disposal of chemicals. It is recommended to specify the site of disposal while a reference to the applicable legislation is not necessary.	

7.3.3.9 Specific Target Organ Toxicity (Repeated Exposure)

Hazard category	Signal word	Hazard statement	
1	Danger	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)	

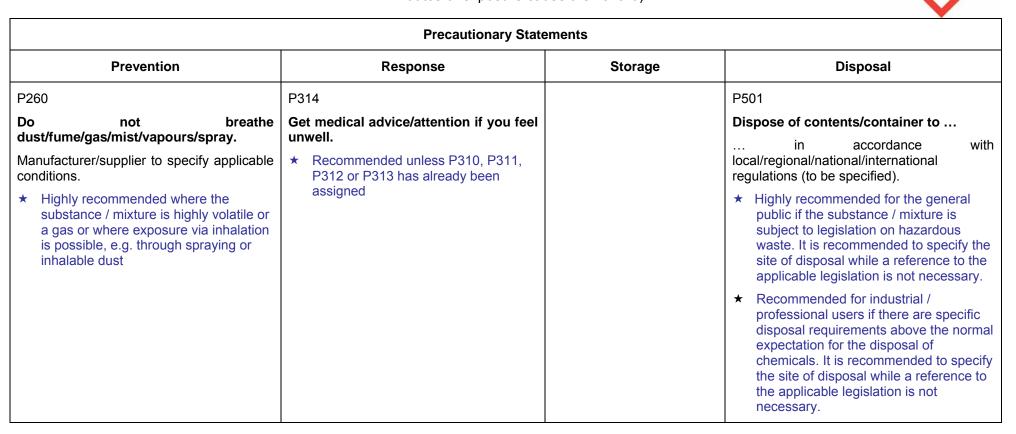
Precautionary Statements					
Prevention	Response Storage		Disposal		
P260	P314		P501		
Do not breathe dust/fume/gas/mist/ vapours/spray.	Get medical advice/attention if you feel unwell.		Dispose of contents/container to		
Manufacturer/supplier to specify applicable conditions.	★ Recommended unless P310, P311, P312 or P313 has already been		local/regional/national/international regulations (to be specified).		
 Highly recommended where the substance / mixture is highly volatile or a gas or where exposure via inhalation is possible, e.g. through spraying or inhalable dust P264 	assigned		 Highly recommended for the general public if the substance / mixture is subject to legislation on hazardous waste. It is recommended to specify the site of disposal while a reference to the 		
Wash thoroughly after handling.			 applicable legislation is not necessary. Recommended for industrial / 		
Manufacturer / supplier to specify parts of the body to be washed after handling.			professional users if there are specific disposal requirements above the normal		
★ Optional			expectation for the disposal of chemicals. It is recommended to specify		
P270			the site of disposal while a reference to		
Do not eat, drink or smoke when using this product.			the applicable legislation is not necessary.		

(draft)

★ Recommended for the general public		
★ Optional for industrial / professional users		
★ Recommended for inclusion in the Safety Data Sheet		

7.3.3.9 Specific Target Organ Toxicity (Repeated Exposure)

Hazard category	Signal word	Hazard statement	
2	Warning		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)



7.3.3.10 Aspiration Hazard

Hazard category

Signal word

Hazard statement



Danger

H304 May be fatal if swallowed and enters airways

Precautionary Statements			
Storage	Disposal		
 P405 a Store locked up. * Highly recommended for the general public * Optional for industrial / professional users unless other considerations deem it necessary 	Disposal P501 Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified). * Highly recommended for the general public if the substance / mixture is subject to legislation on hazardous waste. It is recommended to specify the site of disposal while a reference to the applicable legislation is not necessary. * Recommended for industrial / professional users if there are specific disposal requirements above the normal expectation for the disposal of chemicals. It is recommended to specify		
n	Storage P405 a Store locked up. * Highly recommended for the general public * Optional for industrial / professional users unless other considerations deem it		

7.3.4 Specific Precautionary Statements for Environmental Hazards

7.3.4.1 Hazardous to the Aquatic Environment – Acute Hazard



Hazard category	Signal word	Hazard statement
1	Warning	H400 Very toxic to aquatic life

Precautionary Statements			
Prevention	Response	Storage	Disposal
P273	P391		P501
Avoid release to the environment.	Collect spillage.		Dispose of contents/container to
- if this is not the intended use.	* Recommended		in accordance with
★ Recommended, unless this is the intended use			local/regional/national/international regulations (to be specified).
			 ★ Highly recommended for the general public if the substance / mixture is subject to legislation on hazardous waste. It is recommended to specify the site of disposal while a reference to the applicable legislation is not necessary.
			★ Recommended for industrial / professional users if there are specific disposal requirements above the normal expectation for the disposal of chemicals. It is recommended to specify the site of disposal while a reference to the applicable legislation is not necessary.

7.3.4.1 Hazardous to the Aquatic Environment – Chronic Hazard

Hazard category	Signal word	Hazard statement
1	Warning	H410 Very toxic to aquatic life with long lasting effects
2	No signal word	H411 Toxic to aquatic life with long lasting effects



	Precautionary Statements				
Prevention	Response	Storage	Disposal		
P273	P391		P501		
Avoid release to the environment.	Collect spillage.		Dispose of contents/container to		
 if this is not the intended use. Recommended, unless this is the intended use 	* Recommended		in accordance with local/regional/national/international regulations (to be specified).		
			★ Highly recommended for the general public if the substance / mixture is subject to legislation on hazardous waste. It is recommended to specify the site of disposal while a reference to the applicable legislation is not necessary.		
			★ Recommended for industrial / professional users if there are specific disposal requirements above the normal expectation for the disposal of chemicals. It is recommended to specify the site of disposal while a reference to the applicable legislation is not necessary.		

7.3.4.1 Hazardous to the Aquatic Environment – Chronic Hazard

Hazard category	Signal word	Hazard statement
3	No signal word	H412 Harmful to aquatic life with long lasting effects
4	No signal word	H413 May cause long lasting harmful effects to aquatic life

Precautionary Statements				
Prevention	Response	Storage	Disposal	
P273			P501	
Avoid release to the environment.			Dispose of contents/container to	
- if this is not the intended use.			in accordance with	
★ Recommended unless this is the intended use			local/regional/national/international regulations (to be specified).	
			★ Highly recommended for the general public if the substance / mixture is subject to legislation on hazardous waste. It is recommended to specify the site of disposal while a reference to the applicable legislation is not necessary.	
			★ Recommended for industrial / professional users if there are specific disposal requirements above the normal expectation for the disposal of chemicals. It is recommended to specify the site of disposal while a reference to the applicable legislation is not necessary.	

7.3.5 Additional Hazards

7.3.5.1 Hazardous to t	he ozone layer (see the ex	planations provided in section 4.8 of this document)	
Hazard category	Signal word	Hazard statement	
1	Warning	H420 Harms public health and the environment by destroying ozone in the upper atmosphere	$\mathbf{\nabla}$

Precautionary Statements				
Prevention Response Storage Disposal				
			P502	
			Dispose of contents/container to	
			Refer to manufacturer/supplier for information or recovery / recycling	
			★ Highly recommended	

7.4. Examples for the selection of precautionary statements for the label

The selection of precautionary statements along the lines of the proposed guidance above is illustrated below with various model substances. The set of precautionary statements to be prioritized for the label is highlighted in **bold underlined (highly recommended)** and <u>underlined (recommended)</u>, while the optional statements appear in normal letters (no highlighting) and the statements not to be used are put in grey colour.

Please note that even if a substance or mixture has the same hazards as one of the following
 examples, another set of precautionary statements might be appropriate based on the specific
 conditions for use given in the tables above.

10

11 **1.** Example of a substance (imaginary) assigned a physical and various health hazard 12 classifications

13 <u>A. Classification and hazard statements:</u>

- 14 Flam. Liq. 2 H225 (Highly flammable liquid and vapour)
- 15 Acute Tox. 3 (oral) H301 (Toxic if swallowed)
- 16 Acute Tox. 3 (dermal) H311 (Toxic in contact with skin)
- 17 Acute Tox. 3 (inhalation) H331 (Toxic if inhaled)
- 18 STOT-SE 1 H370 (Causes damage to organs)
- 19
- 20 B. Further information:

This substance is presumed to be volatile, but not so as to generate a potentially explosive atmosphere. There is possible exposure via inhalation. Specific extinction media are not necessary. Specific treatment/measures is/are not urgently required. There are no specific disposal requirements. The substance is not intended to be used by the general public, but rather only by industrial/professional users.

26 <u>C. Precautionary statements on the basis of the classification (see Annex IV to CLP) and</u>
 27 <u>according to the guidance:</u>

Acute Tox. 3 (Oral)	Acute Tox. 3 (Dermal)	Acute Tox. 3 (Inhalation)	STOT-SE 1	Flam. Liq. 2
P264	<u>P280</u>	P261	<u>P260</u>	<u>P210</u>
P270		P271	P264	<u>P233</u>
			P270	P240
				P241
				P242
				P243

				P280
<u>P301 + P310</u>	P312	<u>P304 + P340</u>	<u>P307 + P311</u>	P303 + P361 + P353
P321	P322	<u>P311</u>	P321	P370 + P378
P330	P361	P321		
	P363			
	P302 + P352			
P405	P405	<u>P403 + P233</u>	P405	P403 + P235
		P405		
P501	P501	P501	P501	P501

1

2 **<u>P261</u>** = highly recommended <u>P261</u> = recommended P261 = optional <u>P261</u> = not to be 3 used/unless condition applies/inclusion on Safety Data Sheet only

4

5 D. Selection of highly recommended and recommended precautionary statements:

6 Where the same statement is assigned to different hazards, but with different priority, the most 7 conservative approach is taken. Where appropriate, precautionary statements are combined 8 into a single combination statement. Duplication of individual phrases is avoided. This results in 9 the following in the case of this substance:

- 10 P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
- 11 P260 Do not breathe dust/fume/gas/mist/vapours/spray.

12 **P280** Wear protective gloves/protective clothing/eye protection/ face protection.

13 P301+P310 IF SWALLOWED: Immediately call a POISON Center or doctor/physician.

14 P307+P311 IF exposed: Call a POISON CENTER or doctor/physician.

15P304+P340IF INHALED: Remove victim to fresh air and keep at rest in a position16comfortable for breathing.

17 P403+P233 Store in a well-ventilated place. Keep container tightly closed.

- 18
- 19 <u>E. Result:</u>

A substantial reduction is achieved: selection in line with the guidance results in seven precautionary statements. This compares with a starting set of 28 different potentially applicable statements for the CLP hazard label, assignable on the basis of the underlying

23 hazards.

24 The selected precautionary statements should be placed on the CLP hazard label. As a Safety

- 25 Sheet needs to be prepared, they would also have to be included in the Safety Data Sheet,
- under heading 2.2 ("Labelling elements"), see the (draft) guidance on the compilation of Safety

1 Data Sheets. The de-selected statements can be introduced under the relevant headings of the 2 Safety Data Sheet as well, to provide the industrial or professional user with sufficient 3 information to handle the substance safely.

4 2. Example of a substance (sodium peroxide Na₂O₂, EC No 215-209-4) assigned a severe 5 physical and health hazard classification

- 6 A. Classification and hazard statements:
- 7 Ox. Sol. 1 H271 (May cause fire or explosion; strong oxidiser)
- 8 Skin Corr. 1A H314 (Causes severe skin burns and eye damage)
- 9
- 10 <u>B. Further information:</u>
- 11 This substance is presumed to be non-volatile. There is therefore no exposure via inhalation.
- 12 Specific extinction media are not necessary. Specific treatment/measures is/are not urgently
- 13 required. There are no specific disposal requirements. The substance is not intended to be used
- 14 by the general public, but rather only by industrial/professional users.
- 15 <u>C. Precautionary statements on the basis of the classification (see Annex IV to CLP) and</u> 16 <u>according to the guidance:</u>
- 17

Ox. Sol. 1	Skin Corr. 1A
<u>P210</u>	
P220	P260
<u>P221</u>	P264
<u>P280</u>	<u>P280</u>
P283	
	<u>P301+P330+P331</u>
	<u>P303+P361+P353</u>
<u>P306+P360</u>	P363
<u>P371+P380+P375</u>	P304+P340
P370+P378	<u>P310</u>
	P321
	<u>P305+P351+P338</u>
-	P405
P501	P501

18

- 1 <u>P261</u> = highly recommended <u>P261</u> = recommended P261 = optional <u>P261</u> = not to be
- 2 used/unless condition applies/inclusion on Safety Data Sheet only
- 3
- 4 D. Selection of highly recommended and recommended precautionary statements:
- 5 Where the same statement is assigned to different hazards, but with different priority, the most 6 conservative approach is taken. Where appropriate, precautionary statements are combined 7 into a single combination statement. Duplication of individual phrases is avoided. This results in
- 8 the following in the case of this substance:
- 9 P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
- 10 **P221** Take any precaution to avoid mixing with combustibles.
- 11 **P280** Wear protective gloves/protective clothing/eye protection/ face protection.
- 12 P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
- 13P303+P361+P353+310IF ON SKIN (or hair): Remove/Take off immediately all14contaminated clothing. Rinse skin with water/shower. Immediately call a POISON15CENTER or doctor/physician.
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove
 contact lenses, if present and easy to do. Continue rinsing.
- 18 P371+P380+P375 In case of major fire and large quantities: Evacuate area. Fight fire
 19 remotely due to the risk of explosion.
- 20
- 21 <u>E. Result:</u>

A substantial reduction is achieved: selection in line with the guidance results in seven, mostly combined, precautionary statements. This compares with a starting set of 19 different potentially applicable statements for the CLP hazard label, assignable on the basis of the underlying hazards.

The selected precautionary statements should be placed on the CLP hazard label. As a Safety Data Sheet needs to be prepared, they would also have to be included in the Safety Data Sheet, under heading 2.2 ("Labelling elements"), see the (draft) guidance on the compilation of Safety Data Sheets. The de-selected statements can be introduced under the relevant headings of the Safety Data Sheet as well, to provide the industrial or professional user with sufficient information to handle the substance safely.

32

33 3. Example of a substance (dimethylzinc, EC No 208-884-1) assigned physical, health and
 34 environmental classifications

- 35 A. Classification and hazard statements:
- 36 Pyr. Liq. 1 H250
- 37 Water-react. 1 H260
- 38 Skin Corr. 1B H314

- 1 Aquatic Acute 1 (H400; is redundant because of H410)
- 2 Aquatic Chronic 1 H410

3

4 <u>B. Further information:</u>

5 This substance is presumed to be non-volatile. There is therefore no exposure via inhalation. 6 Specific extinction media are necessary, because water will increase the risk when used for the 7 extinction of fire. Specific disposal requirements are in place. The substance is not intended to 8 be used by the general public, but rather only by industrial/professional users.

9

10 <u>C. Precautionary statements on the basis of the classification (see Annex IV to CLP) and</u> 11 <u>according to the guidance:</u>

12

Pyr. Liq.1	Water-react. 1	Skin Corr. 1B	Aquatic Acute 1	Aquatic Chronic 1
<u>P210</u> P222 <u>P280</u> <u>P231(add</u>)	P223 P231+P232 <u>P280</u>	P260 P264 <u>P280</u>	<u>P273</u>	<u>P273</u>
<u>P302+P334</u> <u>P370+P378</u>	<u>P335+P334</u> <u>P370+P378</u>	<u>P301+P330+P331</u> <u>P303+P361+P353</u> P363 P304+P340 <u>P310</u> P321 <u>P305+P351+P338</u>	<u>P391</u>	<u>P391</u>
P422	P402+P404	P405	-	-
-	P501	<u>P501</u>	<u>P501</u>	<u>P501</u>

13

14 **P261** = highly recommended <u>P261</u> = recommended P261 = optional P261 = not to be 15 used/unless condition applies/inclusion on Safety Data Sheet only

16

17 D. Selection of highly recommended and recommended precautionary statements:

1 Where the same statement is assigned to different hazards, but with different priority, the most 2 conservative approach is taken. Where appropriate, precautionary statements are combined 3 into a single combination statement. Duplication of individual phrases is avoided.

4 P303+ P361+P353 (IF ON SKIN (or hair): Remove / Take off immediately all contaminated 5 clothing. Rinse skin with water / shower.) and P302+P335+P334+P310 (IF ON SKIN: Brush off loose particles from skin. Immerse in cool water.¹⁵ Immediately call a POISON CENTER or 6 7 doctor/physician.) were merged into one single combination phrase 8 P303+ P335+P334+P310+P361 where duplication of the message was avoided.

9 This results in the following in the case of this substance:

10 P210 Keep away from heat/sparks/open flames/hot surfaces. – No smoking.

11 P273 Avoid release to the environment.

12 **P280** Wear protective gloves/protective clothing/eye protection/ face protection.

- 13 P391 Collect spillage.
- 14 P501 Dispose of contents/container to ...

15 P231+P232 Handle under inert gas. Protect from moisture.

16 P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

17 P303+ P335+P334+P310+P361 IF ON SKIN (or hair): Brush off loose particles from

18 skin. Immerse in cool water.¹⁶Immediately call a POISON CENTER or doctor/physician
 19 Remove / Take off immediately all contaminated clothing.

20P305+P351+P338IF IN EYES: Rinse cautiously with water for several minutes.21Remove contact lenses, if present and easy to do. Continue rinsing.

- 22 P370+P378 In case of fire: Use ... for extinction.
- 23
- 24 <u>E. Result:</u>

A substantial reduction is achieved: selection in line with the guidance results in 10,

26 partly combined, precautionary statements. This compares with a starting set of 23 27 different potentially applicable statements for the CLP hazard label, assignable on the

28 basis of the underlying hazards.

However, a set of 10 mostly long precautionary statements exceeds the target number of six and also the amount of digestible information. It may be worthwhile to consider whether at least the statements P391 and P501 should be put in the Safety Data Sheet instead of on the label as the prevention and response statements for the physical and

instead of on the label as the prevention and response statements for the physical and health hazards appear to contain the more urgent advice for the label. This would further

- 35 near in nazarus appear to contain the more urgent advice for the label. 1 34 roduce the number of statements on the label to eight
- 34 reduce the number of statements on the label to eight.

¹⁵ The sub-phrase of P334 "/wrap in wet bandages" is not to be used for water-reactive substances and mixtures category 1, see Table 7.2.12.

¹⁶ The sub-phrase of P334 "/wrap in wet bandages" is not to be used for water-reactive substances and mixtures category 1, see Table 7.2.12.

1 The selected precautionary statements should be placed on the CLP hazard label. As a Safety 2 Data Sheet needs to be prepared, they would also have to be included in the Safety Data 3 Sheet, under heading 2.2 ("Labelling elements"), see the (draft) guidance on the compilation of 4 Safety Data Sheets. The de-selected statements can be introduced under the relevant headings 5 of the Safety Data Sheet as well, to provide the industrial or professional user with sufficient 6 information to handle the substance safely.

7

8 4. Example of a mixture (imaginary) for consumer use

9 A. Classification and hazard statements:

- 10Flam. Liq. 2H225 (Highly flammable liquid and vapour)
- 11 Acute Tox. 4 (oral) H302 (Harmful if swallowed)
- 12 Skin irrit. 2 H315 (Causes skin irritation)

13

14 <u>B. Further information:</u>

15 This mixture is presumed to be volatile, but not so as to generate a potentially explosive

16 atmosphere. Specific extinction media are not necessary. Specific treatment is not urgently 17 required. There are no specific disposal requirements. The mixture is intended to be used by the 18 general public.

18 general public.

19 <u>C. Precautionary statements on the basis of the classification (see Annex IV to CLP) and</u>
 20 <u>according to the guidance:</u>

21

Flam. Liq. 2	Acute Tox. 4 (Oral)	Skin Irrit. 2
	<u>P102, P102</u>	
<u>P210</u>	<u>P264</u>	P264
<u>P233</u>	<u>P270</u>	<u>P280</u>
P240		
P241		
P242		
P243		
P280		
P303 + P361 + P353	P301+P312	P302+P352
P370 + P378	P330	P321
		P332+P313

		P362
P403 + P235	-	-
P501	P501	-

1

2 **<u>P261</u>** = highly recommended <u>P261</u> = recommended <u>P261</u> = optional <u>P261</u> = not to be 3 used/unless condition applies/inclusion on Safety Data Sheet only

4

5 D. Selection of highly recommended and recommended precautionary statements:

6 Where the same statement is assigned to different hazards, but with different priority, the most 7 conservative approach is taken. Where appropriate, precautionary statements are combined

8 into a single combination statement. Duplication of individual phrases is avoided. This results in

9 the following in the case of this substance:

10 P101 If medical advice is needed, have product container or label at hand.

11 P102 Keep out of reach of children.

12 P210 Keep away from heat/sparks/open flames/hot surfaces. – No smoking.

- 13 P233 Keep container tightly closed.
- 14 P264 Wash ... thoroughly after handling.
- 15 P270 Do not eat, drink or smoke when using this product.
- 16 <u>P280 Wear protective gloves.</u>
- 17
- 18 E. Result:
- 19 A substantial reduction is achieved: selection in line with the guidance results in seven
- 20 precautionary statements. This compares with a starting set of 19 different potentially
- 21 applicable statements for the CLP hazard label, assignable on the basis of the underlying
- hazards.
- 23
- 24

- 1
- 2

3 Attachment: Glossary

4 Terms used in this guidance document

5 **ADR** means the European Agreement concerning the International Carriage of Dangerous Goods by 6 Road, concluded in Geneva on 30 September 1957, that has been implemented within the EU 7 through Directive 2008/68/EC;

8 Acute toxicity means those adverse effects occurring following oral or dermal administration of a single 9 dose of a substance or mixture, or multiple doses given within 24 hours, or an inhalation exposure of 4 10 hours.

Aerosols means aerosol dispensers, 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;

- 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 CLP;
- 18 Article, as defined in Article 2(9) of the CLP Regulation, means an object which during production is 19 given a special shape, surface or design which determines its function to a greater degree than does its 20 chemical composition;
- 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;
- 23 **Carcinogen** means a substance or a mixture of substances which induces cancer or increases its 24 incidence
- CLP or CLP Regulation means Regulation (EC) No 1272/2008 on Classification, Labelling and
 Packaging of Substances and Mixtures;
- 27 **CMR** means a substance or mixture which is carcinogenic, mutagenic or toxic to reproduction
- 28 **Corrosive to metals** means materially damaging, or even destroying, metals by chemical action of a substance or a mixture;
- 30 **CRC** means child-resistant closure;
- 31 **CRF** means child-resistant fastening;
- 32 **Distributor** means any natural or legal person established within the Community, including a retailer, who 33 only stores and places on the market a substance, on its own or in a mixture, for third parties;

34 **Downstream user** means any natural or legal person established within the Community, other than the

35 **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) REACH Regulation, shall be regarded as a **downstream**

- 38 **user**;
- 39 **DPD** means the Dangerous Preparations Directive (1999/45/EC);
- 40 **DSD** means the Dangerous Substances Directive (67/548/EEC);
- 41 **Explosive article** means an article containing one or more explosive substances;

Explosive substance means 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;

5 **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;

7 **Flammable gas** means a gas having a flammable range with air at 20 °C and a standard pressure of 101.3 kPa;

9 Flammable liquid means a liquid having a flash point of not more than 60°C. Flash point means the 10 lowest temperature (corrected to a standard pressure of 101.3 kPa) at which the application of an ignition 11 source causes the vapours of a liquid to ignite under specified test conditions;

Flammable solid means a solid which is readily combustible, or may cause or contribute to fire through friction;

14 GHS means the "Globally Harmonised System of Classification and Labelling of Chemicals" developed 15 within the United Nations (UN) structure;

- 16 **Hazard category** means the division of criteria within each hazard class, specifying hazard severity;
- 17 Hazard class means the nature of the physical, health or environmental hazard;

Hazard pictogram (sometimes also referred to as "pictogram" in this document) means a graphical composition that includes a symbol plus other graphic elements, such as a border, background pattern or

20 colour that is intended to convey specific information about the hazard concerned;

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;

- Hazardous means fulfilling the criteria relating to physical hazards, health hazards or environmental hazards, laid down in parts 2 to 5 of Annex I of CLP;
- IMDG Code means the "International Maritime Dangerous Goods Code" for the transport of dangerous
 goods by sea;
- 27 **Import** means the physical introduction into the customs territory of the Community;
- Importer means any natural or legal person established within the Community who is responsible for import;
- 30 **INCI** means International Nomenclature of Cosmetic Ingredients;

Intermediate packaging means packaging placed between inner packaging, or articles, and outer packaging;

33 **IUCLID** means the International Uniform Chemical Information Database;

34 Label means an appropriate group of written, printed or graphic information elements concerning a

hazardous substances or mixture, selected as relevant to the target sector (s), that is affixed to, printed on, or attached to the immediate container of a hazardous substance or mixture, or to the outside

37 packaging of a hazardous substances or mixture (definition follows Chapter 1.2 of the UN GHS);

38 **Label element** means one type of information that has been harmonised for use in a label, e.g. hazard 39 pictogram, signal word;

40 **M-factor** means a multiplying factor. It is applied to the concentration of a substance classified as 41 hazardous to the aquatic environment acute category 1 or chronic category 1, and is used to derive by 42 the summation method the classification of a mixture in which the substance is present;

43 **Manufacturer** means any natural or legal person established within the Community who manufactures a 44 substance within the Community;

1 **Manufacturing** means production or extraction of substances in the natural state;

2 **Mixture** means a mixture or solution composed of two or more substances (Note: "Mixture" (CLP) and 3 "preparation" (REACH) are synonymous). However, UN GHS Chapter 1.2 includes the phrase, "in which 4 they do not react" at the end of an otherwise identical definition:

- 5 **Mutagen** means an agent giving rise to an increased occurrence of mutations in populations of cells and 6 /or organisms;
- 7 **Organic peroxide** means a liquid or solid organic substance which contains the bivalent -O-O-structure
- 8 and may be considered a derivative of hydrogen peroxide, where one or both of the hydrogen atoms have 9 been replaced by organic radicals. The term also includes organic peroxide formulations (mixtures);
- 10 **Oxidising gas** means any gas which may, generally by providing oxygen, cause or contribute to the 11 combustion of other material more than air does;
- 12 **Oxidising liquid** means a liquid which, while in itself not necessarily combustible, may, generally by yielding oxygen, cause, or contribute to, the combustion of other material;
- 14 **Oxidising solid** means a solid which, while in itself not necessarily combustible, may, generally by yielding oxygen, cause, or contribute to, the combustion of other material;
- 16 **Package** means the complete product of the packing operation, consisting of the packaging and its contents;
- 18 Packaging means one or more receptacles and any other components or materials necessary for the 19 receptacles to perform their containment and other safety functions;
- 20 **Pictogram** see hazard pictogram
- 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.
- 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;
- 26 **Product identifier** means details permitting the identification of the substance or mixture;
- Pyrophoric liquid means a liquid which, even in small quantities, is liable of igniting within five minutes
 after coming into contact with air;
- **Pyrophoric solid** means a solid which, even in small quantities, is liable of igniting within five minutes after coming into contact with air;
- 31 **Pyrotechnic article** means an article containing one or more pyrotechnic substances;
- 32 Pyrotechnic substance means a substance or mixture of substances designed to produce an effect by 33 heat, light, sound, gas or smoke or a combination of these as the result of non-detonative self-sustaining 34 exothermic chemical reactions;
- REACH and REACH Regulation means Regulation (EC) No 1907/2006 concerning the Registration,
 Evaluation, Authorisation and Restriction of Chemicals;
- 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 the REACH Regulation;
- 39 **Reproductive Toxicity** includes adverse effects on sexual function and fertility in adult males and 40 females, as well as developmental toxicity in the offspring and effects on or via lactation;
- 41 **Respiratory sensitiser** means a substance that will lead to hypersensitivity of the airways following 42 inhalation of the substance;
- 43 **SADT** means Self-Accelerating Decomposition Temperature;

1 **SDS** means "Safety Data Sheet";

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

6 Self-reactive substance means a thermally unstable liquid or solid substance liable to undergo a
 7 strongly exothermic decomposition even without participation of oxygen (air). This definition excludes
 8 substances or mixtures classified under CLP as explosive, organic peroxides or as oxidising;

9 **Serious eye damage** means the production of tissue damage in the eye, or serious physical decay of 10 vision, following application of a test substance to the anterior surface of the eye, which is not fully 11 reversible within 21 days of application;

12 **Signal word** means a word that indicates the relative level of severity of hazards to alert the potential 13 reader of the hazard; the following two levels are distinguished:

- 14 (a) Danger means a signal word indicating the more severe hazard categories; and
- 15 (b) Warning means a signal word indicating the less severe hazard categories;

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 up to 4 hours;

- 18 Skin irritation means the production of reversible damage to the skin following the application of a test19 substance for up to 4 hours;
- 20 **Skin sensitiser** means a substance that will lead to an allergic response following skin contact.
- 21 **Specific target organ toxicity** means specific target organ toxicity, cf. STOT, STOT-SE and STOT-RE;
- 22 STOT means specific target organ toxicity;
- STOT-RE means specific target organ toxicity arising from a repeated exposure to a substance or mixture;
- 25 STOT-SE means specific target organ toxicity arising from a single exposure to a substance or mixture;

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 identified 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;

- 30 **Symbol** means a graphical element intended to succinctly convey information;
- 31 **Trade name** means a designation under which a substance or mixture is placed on the market
- 32 **TWD** means tactile warnings of danger;

UN GHS means the international criteria agreed by the United Nation Economic and Social Council (UN
 ECOSOC) for the classification and labelling of hazardous substances and mixtures, called the "Globally
 Harmonised System of Classification and Labelling of Chemicals";

- 36 **UN RTDG** means the United Nations Recommendations on the Transport of Dangerous Goods; and
- 37 **Use** means any processing, formulation, consumption, storage, keeping, treatment, filling into containers,
- 38 transfer from one container to another, mixing, production of an article or any other utilisation.
- 39

40 **Organisations**

41 **Agency** means the "European Chemicals Agency," also known as the ECHA, established under the 42 REACH Regulation;

- **CAS** means "Chemical Abstract Service";
- Competent Authority (CA) means the authority or authorities or bodies established by the member
 States to carry out the obligations arising from the CLP Regulation;
- **ECHA** means the "European Chemicals Agency," also known as "the Agency," established under the 5 REACH Regulation;
- **EU** means the "European Union";
- **IUPAC** means the "International Union of Pure and Applied Chemistry";
- **UN** means the "United Nations".

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