

Guidance on labelling and packaging in accordance with Regulation (EC) No 1272/2008

Version 4.1
May 2020



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Guidance on labelling and packaging in accordance with Regulation (EC) No 1272/2008

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Document History

Version	Changes	Date
Version 1.0 (originally unnumbered)	First edition	April 2011
Version 2.0	<p>Full revision of the guidance addressing the content and structure. Main changes in the guidance document include the following:</p> <ul style="list-style-type: none"> • Alignment with the 4th Adaptation to Technical Progress (ATP) to the CLP Regulation (Commission Regulation (EU) No 487/2013) bringing the CLP in line with the 4th revised edition of the UN Globally Harmonised System (GHS); • Addressing the provisions of the 5th ATP to the CLP Regulation (Commission Regulation (EU) No 944/2013) amending precautionary statement P210 to fully align it with the changes arising from the 5th Revision of the UN GHS; • Addition of new section 3.5.1 on child-resistant fastening (CRF) and tactile warnings of danger (TWD); • Addition of new section 3.5.2 including information on additional safety measures for liquid laundry detergents in soluble capsules adopted by the Commission through Regulation (EU) No 1297/2014; • Addition of new sections 4.2.1 and 4.2.2 clarifying the provisions of CLP Article 18(3) with regard to product identifiers for substances and mixtures; • Re-organisation of information in section 4.3 by inclusion of new sections 4.3.1, 4.3.2, 4.3.3; • Addition of new section 4.3.4 describing the issue of blank pictograms; • Re-organisation and clarification of information on supplemental labelling in section 4.8 by inclusion of new sections 4.8.1 and 4.8.2; • Inclusion of clarification on the issue of “readability” and “minimum letter size” in section 5.2; • Re-organisation and update of the text in section 5.3 to reflect the provisions of CLP Article 29 and sections 1.5.1 and 1.5.2 of Annex I to CLP; • Inclusion of information on general and specific requirements for fold-out labels in section 5.3.1.1; • Section 6: Update of the labels and the text in examples in line with the provisions of the 4th and 5th ATPs to CLP; • Deletion of Example 6.6 (Single language label of a plant protection product for supply & use in form of a fold-out booklet); • Inclusion of new Example 6 (fold-out label for a mixture supplied to the general public); 	September 2016

	<ul style="list-style-type: none"> • Addition of section 6.1 separating the examples of labels on packagings that are small or difficult to label; • Addition of a new section 6.1 describing labelling of two-component products; • Clarification and extension of the text in section 7.2; • Section 7.3: Update of the precautionary statements in selection tables according to the provisions of the 4th and 5th ATPs to CLP; • Section 7.4: Update of the practical examples in line with the provisions of the 4th and 5th ATPs to CLP; • Deletion of the outdated references to past deadlines and to the DSD and DPD provisions thorough the whole document; • Alignment of the document with the latest ECHA corporate image requirements. 	
Version 3.0	<p>Full revision of the guidance. Main changes in the guidance document include the following:</p> <ul style="list-style-type: none"> • Alignment with the 8th Adaptation to Technical Progress (ATP) to the CLP Regulation (Commission Regulation (EU) 2016/918); • Addition of a new section 5.4.2 clarifying the issue of packaging used for consolidation of supply packaging during transport; • Update of the precautionary statements according to the provisions of 8th ATP (section 6, section 7.3 and section 7.4). 	July 2017
Version 4.0	<p>Full revision of the guidance. Main changes in the guidance document include the following:</p> <ul style="list-style-type: none"> • Alignment with Commission Regulation (EU) 2017/542, which amends the CLP Regulation by adding an Annex on harmonised information relating to emergency health response; • Addition of a new section 6.2 describing the labelling of multi-component products with label examples; • Deletion of the outdated paragraph "Limited derogation for re-labelling and re-packaging" in Section 2.4 and deletion of outdated section 3.4 on the "Differences between CLP and DSD/DPD labelling rules"; • Editorial changes and reformatting of the document; • "Preamble" renamed "Preface" and moved before the table of contents; • Update of broken and outdated hyperlinks; • Renumbering of sections, tables and figures. 	March 2019
Version 4.1	Update via fast track to implement the amendment of the legal text	May 2020

	<p>due to Commission Delegated Regulation 2020/11 of 29 October 2019. In particular:</p> <ul style="list-style-type: none">• Clarification of labelling requirements with regards to the UFI code in standard situations (in section 4.8.1.1);• Clarification of labelling requirements with regards to the UFI code in particular cases of fold-out labels, tie-on tags or outer packaging (section 5.3.1);• Minor changes and clarification in the labelling examples concerning mixtures (section 6).	
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Preface

This document describes specific provisions for the labelling and packaging of chemical substances and mixtures under Titles III and IV of the Regulation (EC) No 1272/2008¹ (the CLP Regulation or “CLP”). The aim of this document is to assist manufacturers, importers, downstream users and distributors of substances and mixtures in the effective application of the CLP Regulation.

This guidance includes relevant amendments from the 2nd, 4th, 5th and 8th Adaptations to Technical Progress (ATPs) to the CLP Regulation, as well as the changes brought about by the ATP to the CLP Regulation related to labelling and packaging of liquid laundry detergents in a soluble packaging for single use (Regulation (EU) No 1297/2014).

This document also includes relevant changes introduced by Commission Regulation (EU) 2017/542, which amends the CLP Regulation by adding Annex VIII on harmonised information relating to emergency health response.

All current ECHA guidance documents are available on the ECHA website at: <https://echa.europa.eu/support/guidance>.

¹ Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006; OJ L 353 31.12.2008, p. 1 (<http://eur-lex.europa.eu/legal-content/en/TXT/?uri=CELEX%3A02008R1272-20150601>)

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1. Introduction

1.1 Who should read this document?

This document is relevant for suppliers of chemical substances and mixtures, namely for:

- manufacturers and importers of substances;
- importers of mixtures;
- downstream users of substances and mixtures, including formulators;
- distributors of substances and mixtures, including retailers.

All suppliers must ensure that their substances and mixtures are labelled and packaged in accordance with the provisions of the CLP Regulation (or CLP) before they are placed on the EU market.

1.2 What is in this document?

This document provides guidance on the labelling and packaging requirements of substances and mixtures set out in the CLP Regulation. The guidance opens in [section 2](#) with a general overview, including legal background, scope of the CLP Regulation and updating of CLP labels. That section also includes information about timelines for classification, labelling, packaging and updating of CLP labels. The guidance continues in [section 3](#) and [section 4](#) with an explanation of the requirements for labelling and packaging and rules for the application of the CLP label elements. [Section 5](#) provides guidance on particular aspects of CLP hazard labelling (e.g. exemption from certain labelling and packaging requirements, interaction between the CLP and transport labelling rules, labelling requirements for specific cases of unique packaging). Finally, [section 6](#) and [section 7](#) of the guidance provide practical examples illustrating different situations that may be encountered when designing labels.

In particular, this guidance aims to 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 ([section 4.8](#) of this guidance document);
- the conditions for **small packaging exemptions**;
- the interaction between **CLP and the transport labelling rules**;
- the technical requirements for liquid laundry detergents in a soluble packaging for single use;
- how to select the most appropriate set of **precautionary statements** for the label;
- how to structure the information on the label for appropriate readability.

For specific information on the application of the CLP criteria for physical, health and environmental hazards, the reader is advised to consult the [Guidance on the application of the CLP criteria](#). For a general overview of basic features and procedures laid down in the CLP Regulation, it might be useful to consult the [Introductory Guidance on the CLP Regulation](#).

2. General overview

2.1 Legal background

The CLP Regulation is the EU Regulation on classification, labelling and packaging of substances and mixtures. It is based on the United Nations Globally Harmonized System of Classification and Labelling of chemicals (UN GHS). The CLP Regulation entered into force on 20 January 2009 in the European Union and is now legally binding also in the countries of the European Economic Area (EEA) (Norway, Iceland and Liechtenstein)². The CLP Regulation replaced the provisions of the Dangerous Substances Directive 67/548/EEC (DSD) and the Dangerous Preparations Directive 1999/45/EC (DPD) as of 1 June 2015 (see [section 2.4](#) of this guidance document). The CLP Regulation is directly applicable to suppliers in the EU who manufacture, import, use or distribute chemical substances and mixtures.

This guidance explains the labelling and packaging rules of CLP and illustrates with some examples how labels could be laid out.

In general, the CLP label must display certain label elements taken over from UN GHS, including hazard pictogram(s), signal word, hazard and precautionary statements along with supplemental information, where applicable, which reflect the assigned classification of the substance or mixture. At the same time, the CLP Regulation retains some of the labelling concepts of the DSD and DPD, such as the small packaging exemptions. In order to accommodate certain hazard information not yet covered by the UN GHS, as well as further label elements that are required by other EU legislation, the CLP Regulation introduces the concept of “supplemental information” for the label.

All supplied substances and mixtures classified as hazardous and contained in a packaging must be labelled in accordance with Title III (*Hazard communication in the form of labelling*) and their packaging must be in accordance with Title IV (*Packaging*) of the CLP Regulation.

In addition to the label, another key tool for hazard communication, intended for professional/industrial users only, is the safety data sheet (SDS). The required SDS format and content are defined in Article 31 and Annex II³ to Regulation (EC) No 1907/2006 (REACH Regulation). These have been adapted to align them with the UN GHS, as well as to be fully in line with the CLP Regulation. The information provided on the hazard label and in Section 2.2 of the SDS, for the same substance or mixture, must be consistent⁴.

For further information on the compilation of the SDS, please consult the [Guidance on the compilation of safety data sheets](#).

² The CLP Regulation was incorporated in the EEA Agreement by Decision of the EEA Joint Committee No 106/2012 of 15 June 2012 amending Annex II (Technical regulations, standards, testing and certification) to the EEA Agreement (OJ L 309, 8.11.2012, p. 6–6).

³ Commission Regulations No 453/2010 and No 2015/830 have amended the REACH Regulation by replacing Annex II to the REACH Regulation with the annexes to these regulations, to align the requirements for safety data sheets with the rules for safety data sheets of the UN GHS, see: http://www.unece.org/trans/danger/publi/ghs/ghs_welcome_e.html.

⁴ CARACAL has endorsed the interpretation that no default requirement to place the Unique Formula Identifier (UFI) in the SDS (except for unpackaged mixtures) is needed. Furthermore, it has been agreed that when relevant, the UFI is to be included in Section 1.1 of the SDS. Please note that the amendment proposal for REACH Annex II is pending adoption by the European Commission (for further details on UFI, please see [section 4.8.1.1](#) of this guidance document).

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 a packaging with the necessary labelling information. A substance or mixture has to be labelled according to the CLP rules where

- the substance or mixture is classified as hazardous;
- the mixture, even if not classified as hazardous, is addressed in CLP Article 25(6). In this case the supplemental label elements as set out in Part 2 of Annex II to CLP must be indicated together with the product identifier, name and telephone number of the supplier.

In addition, an explosive article (i.e. an article containing one or more explosive substances or mixtures) that meets the criteria as described in section 2.1 of Annex I to CLP must be labelled according to the CLP rules.

Substances and mixtures within the scope of Regulation (EC) No 1107/2009⁵ (Plant Protection Products Regulation or PPPR) or Regulation (EU) No 528/2012 (Biocidal Products Regulation or BPR) have to carry CLP labelling elements as appropriate. Substances and mixtures within the scope of the PPPR also need to display the supplemental statement EUH401 '*To avoid risks to human health and the environment, comply with the instructions for use*' (see CLP Article 25(2)). However, the labelling provisions of these acts remain fully applicable to any product within their respective scope (see Recital 47 of the CLP Regulation). For example, there are separate provisions for updating labels for such substances and mixtures in these acts, and their suppliers must apply these provisions instead of the CLP rules (see also CLP Article 30(3)). Another deviation from the CLP Regulation is that different rules apply as to which information may be presented in the form of a leaflet as an alternative way to accommodate the required labelling information (see [section 5.3.1.1](#) of this guidance document).

The CLP Regulation also includes exemptions from labelling and packaging requirements, for example for a packaging that is so small, or in such a shape that it is impossible to meet the general rules for the application of labels (see [section 5.3.1](#) of this guidance document). In addition, the CLP Regulation allows suppliers to omit certain label elements (see [section 5.3.2](#) of this guidance document).

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. Currently, this only applies to substances listed in Part 5 of Annex II to CLP (see [section 5.3.2.4](#) of this guidance document).

2.3 Derogations from labelling requirements for special cases

The CLP Regulation defines derogations from the CLP labelling requirements for special cases and the conditions under which these derogations apply. One example of such a

⁵ 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 must continue to apply with respect to active substances included in Annex I to that Directive for certain transitional periods.

special case is **metals in massive form**. CLP Article 23(d) provides that, in specific cases, exemptions from the labelling requirements apply to: "*metals in massive form, alloys, mixtures containing polymers, mixtures containing elastomers*".

Section 1.3.4.1 of Annex I to CLP elaborates further on CLP Article 23 and gives conditions when labelling is not required, namely: "*if they do not present a hazard to human health by inhalation, ingestion or contact with skin or to the aquatic environment in the form in which they are placed on the market*".

The CLP legal text does not specify when a form of metal should be considered massive. A default particle size limit cannot be specified to determine whether or not CLP Article 23 applies to any metal.

To apply the exemption from the labelling provisions, the manufacturer or supplier must be able to demonstrate the lack of hazard in the form the metal or alloy is placed on the market. Section 2.1 of the SDS must contain the classification of the metal and information on the application of the labelling exemption for the form as placed on the market.

In relation to the other cases described in CLP Article 23, please consult the Article and section 1.3 of Annex I to CLP, as further guidance on these is not provided in this document.

2.4 Timelines for classification, labelling, packaging and updating of CLP hazard labels

The CLP Regulation was introduced gradually before its full application as of 1 June 2015. During this transitional period, some of the rules of the CLP Regulation and the previous legislation (DSD and DPD) were applicable in parallel to give companies time to migrate to the CLP rules. However, companies were allowed to apply the CLP Regulation in full on a voluntary basis, from its entry into force.

For substances, it has been obligatory to classify, label and package according to the CLP Regulation since 1 December 2010. The same obligations have applied for mixtures since 1 June 2015. The transitional period for mixtures classified, labelled and packaged according to DPD and already placed on the market before 1 June 2015 ended on 1 June 2017.

DSD and DPD are no longer applicable in any context and both substances and mixtures must now be classified, labelled and packaged in accordance with the CLP Regulation. This classification must be provided in the SDS for substances and mixtures. There is no longer a requirement to provide either DSD classifications of substances themselves or of component substances in mixtures or the DPD classifications for mixtures in the SDS. Only the corresponding information according to the CLP Regulation need be provided (see also the [Guidance on the compilation of safety data sheets](#)).

Following any changes to the classification and labelling where the revised classification is more severe or where new supplemental label elements are required, CLP Article 30 requires a supplier to update this information on the label without undue delay, i.e. as soon as reasonably practicable.

Where labelling changes other than those described above are required (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.

Where a new or updated harmonised classification arises from an Adaptation to Technical Progress (ATP) to the CLP Regulation, the ATP provides the date of applicability.

Further label changes to be implemented within 18 months would also include the update of labelling information for certain mixtures for which special rules for supplemental labelling in accordance with Part 2 of Annex II to CLP apply.

However, there are separate provisions for updating labels in the BPR and the PPPR and suppliers of substances or mixtures within the scope of these acts must apply these provisions.

3. Requirements of labelling and packaging in accordance with the CLP Regulation

3.1 General labelling rules

General and specific rules regarding the content and application of a CLP label are set out in CLP Article 31.

The CLP Regulation requires that the labels are firmly affixed to one or more surfaces of the immediate container of the substance or mixture and that they must be readable horizontally when the package is set down normally. The label elements themselves, in particular the hazard pictograms, must stand out clearly from the background. Furthermore, all label elements must be of such size and spacing as to be easily read. They must be clearly and indelibly marked. A physical label is not required when the label elements are shown clearly on the packaging itself.

3.2 Elements of the CLP hazard label

According to CLP Article 17, a substance and mixture classified as hazardous must 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.

According to Annex VIII to CLP⁶, a Unique Formula Identifier (UFI), if applicable, must also be added to, i.e. printed on or affixed to, the label of mixtures falling under the scope of CLP Article 45 and Annex VIII to CLP (see [section 4.8.1.1](#) of this guidance document).

⁶ See Commission Regulation (EU) 2017/542.

It should be noted that for particular label elements precedence rules apply. These rules are further explained in the sections below.

- The CLP Regulation requires the label to be written in the official language or languages of the Member States where the substance or mixture is placed on the market, unless the Member State concerned provides otherwise⁷. Suppliers may accomplish this either by producing multi-language labels covering the official languages of several of the countries where the substance or mixture is supplied, or by producing separate labels for each country, each with the appropriate language or languages.

Suppliers may use more languages than those required on their labels if they wish, provided that the same details appear in all languages. However, this should not impact the legibility of the obligatory labelling information, nor can it trigger exemptions from the labelling requirements (see [section 5.3.1](#) of this guidance document).

3.3 Location of information on the CLP hazard label

CLP Article 32 provides some limited rules that define the location of information on the label. However, further details as to how label elements are arranged are left to the discretion of the person responsible for compiling the label. As a general rule, the information should be structured in a way that is easy to read and understand. Examples are outlined in Table 1 below:

⁷ Please consult the table “Languages required for labels and safety data sheets”, which is available on the ECHA website web at: <https://echa.europa.eu/regulations/clp/labelling>.

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 must be kept together on the label.	The supplier is free to choose the arrangement of the pictograms.
Hazard statements must be grouped together on the label.	<p>The supplier may choose the order of the hazard statements.</p> <p>The supplier may choose whether these groups are to be presented on the left, on the right or elsewhere on the label.</p>
Precautionary statements must be grouped together on the label.	<p>The supplier may choose the order of the precautionary statements, but should ensure that they are grouped with the hazard statements.</p> <p>The supplier may choose whether these groups are to be presented on the left, on the right or elsewhere on the label.</p>
In case more than one language is used on the label, the hazard and precautionary statements of the same language must 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 to CLP.
Any supplemental information as referred to in CLP Article 25 must 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.
The label elements must be easily readable (Article 31(3)).	It is recommended to keep full sentences together and in one line, if possible. The font size and spacing must be large enough and in relation to the dimensions of the label.

3.4 CLP rules on packaging of substances and mixtures

Before continuing to describe in more detail the CLP requirements for packaging, the reader should be introduced to the three CLP definitions:

Article 2 (35): '**package**' means the complete product of the packing operation, consisting of the packaging and its contents;

Article 2 (36): '**packaging**' means one or more receptacles and any other components or materials necessary for the receptacles to perform their containment and other safety functions;

Article 2 (37): '**intermediate packaging**' means packaging placed between inner packaging, or articles, and outer packaging;

CLP Article 35 includes the requirements for packaging containing hazardous substances or mixtures. These provisions are to ensure that:

- the packaging is designed, constructed and fastened so that the contents cannot escape;
- the materials of the packaging and fastening are not damaged by the contents and are not liable to form hazardous compounds with the contents;
- the packaging and fastenings are strong and solid throughout to ensure that they will not loosen;
- packaging fitted with replaceable fastening devices is properly designed to allow repeated refastening without the contents escaping;
- the packaging does not attract or arouse the curiosity of children or mislead the consumer when supplied to the general public;
- the packaging does not have a similar presentation or a design used for foodstuff or animal feed stuff or medicinal or cosmetic products which would mislead the consumers.

Packaging that meets the requirements of the transport legislation is deemed to comply with the requirements set out in the bullet points above (Note however that fulfilling the conditions in the above bullet points alone is usually not enough to comply with the requirements of the transport legislation).

For substances and mixtures to be supplied to the general public, the CLP Regulation sets out rules for:

- the use of child-resistant fastening (CRF), also referred to as child-resistant closure (see [section 3.4.1](#) of this guidance document);
- the use of tactile warnings of danger (TWDs) (see [section 3.4.1](#) of this guidance document);
- liquid consumer laundry detergents in soluble packaging for single use (see [section 3.4.2](#) of this guidance document).

The first two provisions are triggered by either a specific hazard class/category or by the concentration of specific substances contained in other substances or in mixtures (see Tables 2 and 3 of this guidance document).

3.4.1 Child-resistant fastening and tactile warnings of danger

The provisions described in this section apply only for product packaging intended for the general public, for example: products on sale/offer at a retailer's or an outlet where the general public have open access to them, products sold to the general public through a website.

The requirements for CRF and TWD do not apply to product packaging which is for professional users only.

Child-resistant fastening

A child-resistant package⁸ is a package consisting of a container and an appropriate closure which is difficult to open (or gain access to the contents) for young children under the age of fifty-two months, but which is not difficult for adults to use properly⁹.

Annex II to CLP refers to two types of CRF for packages:

- **non-reclosable package** - a package that, when all or part of the contents have been removed, cannot be properly closed again, for example a blister pack or air freshener refills;
- **reclosable package** - a package (for example a one litre bottle or a five litre container) that, after it has been initially opened, can be reclosed and re-used numerous times without loss of security.

For fastening of the above-mentioned packages, Annex II to CLP requires conformity with the following standards, as amended:

- EN ISO 8317 (reclosable packages), and
- CEN EN 862 (non-reclosable packages).

Conformity with these standards may only be certified by laboratories that conform to EN ISO/IEC 17025, as amended. The EN ISO/IEC 17025 standard relates to the competence of testing laboratories and the requirements that they must meet to demonstrate that they are technically competent and can generate technically valid results. In specific cases referred to in section 3.1.4.2 of Annex II to CLP, i.e. if it seems obvious that packaging is sufficiently safe for children because they cannot get access to the contents without the help of a tool, the above tests on non-reclosable and reclosable packages do not need to be performed¹⁰.

A packaging of whatever capacity supplied to the general public must be fitted with CRF for substances or mixtures:

- classified for acute toxicity 1-3 – oral (H300 and H301), dermal (H310 and H311) or inhalation (H330 and H331); STOT-SE 1 (H370); STOT-RE 1 (H372); skin corrosion 1, subcategories 1A, 1B, 1C (H314), or
- classified as presenting an aspiration hazard (H304), with the exception of

⁸ Please note that the terminology differs between the CLP legal text and the EN standard. The CLP Regulation refers to packaging fitted with child-resistant **fastening**, whereas EN ISO 8317 refers to child-resistant **packages**.

⁹ According to EN ISO 8317.

¹⁰ See also the [Report on the Forum pilot project on Child-resistant fastenings](#).

substances and mixtures that are placed on the market in the form of aerosols or in a container fitted with a sealed spray attachment, or

- containing methanol at a concentration greater or equal to 3% or dichloromethane at a concentration greater or equal to 1% (see also Table 3 of this guidance document).

Tactile warnings of danger (TWDs)

Packages provided with a TWD enables blind or visually impaired people to ascertain if the packages contains a hazardous substance or mixture. A TWD must be placed on the packaging, so that it can be felt before accessing the contents. The warning must be located in such a way that any other embossed patterns do not cause confusion. The exact location of the TWD must be according to EN ISO standard 11683.

The TWD must also remain tactile during the expected period of use of the package under normal handling conditions. The TWD is not required on outer packaging such as for example a cardboard box protecting a glass bottle¹¹.

Annex II to CLP requires the TWD to conform to standard EN ISO 11683, as amended. The required standard TWD symbol (the "normal" symbol under the ISO standard) is an equilateral triangle. In exceptional cases (if the application of the normal symbol is not physically possible), the three dots symbol may be used. If it is not physically possible to even use the three dots symbol, the three mm symbol may be used¹².

A packaging of whatever capacity supplied to the general public must be fitted with TWD for substances or mixtures classified for:

- acute toxicity 1-4 – oral (H300, H301 and H302), dermal (H310, H311 and H312) or inhalation (H330, H331 and H332);
- skin corrosion 1, subcategories 1A, 1B and 1C (H314);
- germ cell mutagenicity 2 (H341);
- carcinogenicity 2 (H351);
- reproductive toxicity 2 (H361);
- respiratory sensitisation 1, 1A and 1B (H334);
- STOT SE 1 or 2 (H370, H371);
- STOT RE 1 or 2 (H372 and H373);
- aspiration hazard 1 (H304);
- flammable gases 1 and 2 (H220 and H221);
- flammable liquids 1 and 2 (H224 and H225); or
- flammable solids 1 and 2 (H228).

According to section 3.2.1.2 of Annex II to CLP, a TWD is not required for transportable gas receptacles. A TWD is also not required for aerosols and containers fitted with a

¹¹ According to EN ISO 11683.

¹² The arrangement and layout of the triangle, three dots as well as the three mm symbol are specified in EN ISO 11683.

sealed spray attachment containing substances or mixtures classified as presenting an aspiration hazard, unless they are classified for one or more of the other hazards mentioned above.

Table 2 provides an overview of the hazard classifications triggering the CLP provisions for CRF and/or TWD. Table 3 lists substances that can trigger the CLP provisions for CRF and/or TWD if they are present in other substances or in mixtures at a certain concentration.

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

Hazard Class, Category	Child-resistant Fastenings	Tactile Warnings
Acute toxicity 1 to 3	✓	✓
Acute toxicity 4		✓
STOT SE 1	✓	✓
STOT SE 2		✓
STOT RE 1	✓	✓
STOT RE 2		✓
Skin corrosion (category 1, subcategories: 1A, 1B and 1C)	✓	✓
Respiratory sensitisation (category 1, subcategories: 1A and 1B)		✓
Aspiration hazard 1 <i>Note that a CRF and TWD are not required if the substance or mixture is supplied in the form of an aerosol or in a container fitted with a sealed spray attachment and if the substance or mixture is not classified for another hazard triggering CRF or TWD</i>	✓	✓
Germ cell mutagenicity 2		✓
Carcinogenicity 2		✓
Reproductive toxicity 2		✓
Flammable gases 1 and 2		✓
Flammable liquids 1 and 2		✓
Flammable solids 1 and 2		✓

Table 3: Substances that directly 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 mixtures would then have to be classified as flammable liquid category 2, STOT SE category 1 or 2.

** In addition, mixtures containing dichloromethane at a concentration above 1% would be classified as carcinogenic category 2 and thereby need a tactile warning.

3.4.2 Liquid consumer laundry detergents in soluble packaging for single use

Additional safety measures for liquid laundry detergents in soluble capsules are in place. They aim to ensure better protection of the general public, especially young children who can be tempted to put the capsules into their mouth.

These safety requirements make the packaging less attractive and more difficult to open for children. In addition, the packaging is to display warnings to alert parents and child-care providers that such products have to be kept out of reach of children.

Beside these specific rules, the supplier is responsible, according to CLP Article 35(2), for taking all necessary steps to make sure that the design of the packaging is not attractive to children, so that, for instance, it cannot be mistaken for foodstuff or toys.

A consumer laundry detergent is a detergent used for laundry, placed on the market for use by non-professionals, including public launderettes¹³.

CLP Article 35(2) and section 3.3 of Annex II to CLP provide the following requirements on packaging and labelling of liquid laundry detergents in dosages for single use contained in a soluble packaging:

Obligation to market liquid consumer laundry detergents in an outer packaging

Liquid consumer laundry detergents contained in soluble packaging for single use (for example liquid capsules or liquitabs for use in washing machines) must be contained in an outer packaging. Failure to do so is considered as non-compliant with CLP Article 35(1) and section 3.3.1 of Annex II to CLP.

Provisions on the outer packaging

In order to reduce the attractiveness to children of liquid consumer laundry detergents contained in soluble packaging for single use, the outer packaging must be opaque or obscure (for example non-see through container of a block colour(s)) to prevent visibility of the contents, i.e. the product or individual doses.

The outer packaging must bear precautionary statement P102 (“Keep out of reach of children”) at a visible place and in a format that attracts attention.

¹³ Article 2(1a) of Regulation (EC) No 648/2004 on detergents.

Furthermore, the outer packaging must be a self-standing container that is easily re-closable, i.e. the pack closure must be easily re-closable in one single movement (for example with one finger pressure for a tub packaging). This measure aims to avoid the risk that the container will simply be left open if closing is too difficult.

As the main cause of incidents seems to be the easy access to the detergent capsules, the outer packaging must be fitted with a closure that impedes the ability of young children to open the packaging. Such a closure should require a coordinated action of both hands with a certain strength that makes it difficult for young children to open it. It should be noted that this requirement does not necessarily correspond with the closure requirement for CRF described in [section 3.4.1](#) of this guidance document.

In addition, the pack closure must be designed for repeated use to maintain its functionality under conditions of repeated opening and closing for the entire life span of the outer packaging.

Provisions on the soluble (inner) packaging

Additional technical requirements (mechanical resistance and water dissolution) were introduced to make the soluble packaging more resistant.

In addition to the requirements for the outer packaging, the soluble packaging must contain an aversive (e.g. bittering or other repulsive) agent against oral exposure. The aversive agent must be added in a concentration that is safe and that causes oral repulsive behaviour within a maximum time of six seconds.

The soluble film must also meet minimum mechanical and dissolution resistance criteria. It must retain the liquid content for at least 30 seconds when placed in water at 20°C. It must also resist mechanical compression of at least 300 N under standard test conditions.

Soluble packaging for single use with a volume of contents equal to 25 ml or less may benefit from a labelling exemption under the conditions specified in section 1.5.2.2 of Annex I to CLP (see [section 5.3.2.2](#) of this guidance document); the labelling requirements of CLP Article 17 apply to soluble packaging where the volume of contents is more than 25 ml.

4. Rules for the application of the CLP label elements

4.1 Contact details of the supplier

According to CLP Article 17, the contact details of one or several suppliers must be included on the label. In principle, there can be more than one supplier of the same 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, CLP Article 17 does not specify whether the contact details of both suppliers are needed in such cases. Nor does it specify whether the contact details of one particular supplier have precedence.

Following from CLP Article 4(4), each supplier must ensure that a hazardous substance or mixture is labelled and packaged in accordance with Titles III and IV of the CLP Regulation before it is placed on the market. On the way through the supply chain the labelling for the same substance or mixture may vary depending on the volume of the package or as a consequence of further layers of packaging (see [section 5.2](#), [section 5.3](#) and [section 5.4](#) of this guidance document).

Where a supplier changes the packaging so that the label elements set out in CLP Article 17 have to be displayed differently than on the label/package supplied to him, they take the responsibility for re-packaging and re-labelling and should add their own name and contact information on the label. In this case, the supplier may also replace the contact information of their supplier with their own contact details.

When the supplier does not change the packaging, they do not need to add their contact details to the label or replace the contact information of their supplier with their own contact details. They may do so if they wish to. In case the supplier changes the language(s) displayed on a label, they should add their contact details to the contact details of the relevant supplier who issued the original label, as they are then responsible for the correct translation of the label content.

4.2 Product identifiers

This section provides guidance on the requirements for the product identifiers for substances (CLP Article 18(2)) and mixtures (CLP Article 18(3)). As a general rule, the same product identifier(s) as selected for the label must be used in the SDS¹⁴ for a substance or mixture. Any product identifiers selected for the label must be written in the official language(s) of the Member State(s) where the substance or mixture is placed on the market, unless the Member State concerned provides otherwise (see CLP Article 17(2)).

4.2.1 Substances

The product identifier for a substance must consist of at least the following:

- a name and an identification number as given in Part 3 of Annex VI to CLP

¹⁴ For further information, please consult the [Guidance on the compilation of safety data sheets](#).

The name can be any of the names stated as International Chemical Identification in column 2 of the tables in Part 3 of Annex VI to CLP¹⁵. The identification number is typically the Index number, the EC number or the CAS number. It is recommended to use the number that warrants an unambiguous identification of the substance; in some cases it may be warranted to use two numbers, e.g. the CAS and the EC number. When translating the name of an Annex VI substance into the required language(s), it may be useful to check whether an appropriate translation is already available in a public database, for example in ECHA's Classification and Labelling (C&L) Inventory (see <https://echa.europa.eu/information-on-chemicals/cl-inventory-database>). If there is a translated name available in Annex VI to CLP or in the C&L Inventory, this name should be given preference; or

- if the substance is not included in Part 3 of Annex VI to CLP, a name and an identification number as they appear in the C&L Inventory.

The name is typically the IUPAC name¹⁶, the EC name or the CAS name. The identification number must be the EC or the CAS number or the Index number (originating from Table 3 of Annex VI to CLP). It is recommended to use the number or numbers that warrant(s) an unambiguous identification of the substance. The choice of an identifier such as (where applicable) the EC number or CAS number is advisable to minimise the need for revision of the SDS; or

- if the substance is neither included in Part 3 of Annex VI to CLP nor in the C&L Inventory database, the CAS number and the IUPAC name, or the CAS number and another international chemical name, e.g. the name in INCI nomenclature¹⁷, where applicable; 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.

¹⁵ Please note that Commission Regulation (EU) 2018/669 of 16 April 2018 (11th ATP to CLP) introduces translations of the chemical names of substances subject to harmonised classification and labelling listed in Table 3 of Annex VI to CLP in all languages. The 11th ATP was based on the consolidated text of the CLP Regulation up to the 6th ATP, as in the later ATPs the chemical names are already translated. All other information, apart from the chemical names, remains applicable as stated in the relevant ATPs, in particular that related to classification and labelling, unless an entry has been modified by an ATP that has been adopted after the 6th ATP and is already applicable. The 11th ATP will apply from 1 December 2019 but can be used voluntarily ahead of that date.

¹⁶ 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 ECHA, in accordance with CLP Article 40(1)(b), includes both the IUPAC name and the other name used.

¹⁷ The *International Nomenclature Cosmetic Ingredients* (INCI) name is mandatory in the European Union (EU) according to Regulation (EC) No 1223/2009 for labelling the names of ingredients on cosmetic products. The INCI system was introduced in the European Community in 1996/97 and is well established for cosmetic products. It is also used in many non-EU countries. Since 2004, the INCI system is also mandatory in the EU for labelling of preservatives and allergenic perfume ingredients according to the Detergents Regulation (EC) No 648/2004.

4.2.2 Mixtures

The product identifiers for mixtures must 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.

The CLP Regulation does not specify the type of chemical names¹⁸ that should be used to identify the chemical substances in the mixture. It only mentions the approach used for identification of substances in the mixture that contribute to the classification of the mixture (see CLP Article 18(3)(b) and the second paragraph of CLP Article 18(3)). Nevertheless, when choosing a chemical name, it is recommended that the approach outlined in CLP Article 18(2) is followed. On that basis, if a name of the substance is shorter than other names available to the user/consumer or better recognised by the user/consumer in the language of the Member State where the mixture is placed on the market, this name should be used. This is often the case for common or basic ingredients. Furthermore, if there is a translated name available in Annex VI to CLP¹⁹ or in the C&L Inventory, this name should be given preference.

In cases where another international chemical name (for example an INCI name) is better known by the user/consumer, it is possible to deviate from the CLP Article 18(2) approach. It is preferable to use the name that is regarded as well-known. The name of the substance needs to unambiguously define its identity. Where an INCI name does not sufficiently define the substance identity compared to, for example, the requirements of CLP Article 18 (2) or the requirements for SDSs under the REACH Regulation, a clearer identification should be preferred.

If the trade name or the designation of the mixture already includes the name(s) of the substance(s) contributing to the classification of the mixture as defined in paragraph 3(b) of CLP Article 18, they do not need to be repeated. Moreover, if the supplemental information on the label already contains the chemical name of the substance, e.g. in the list of allergens and preservatives required by Regulation (EC) No 648/2004 on detergents, it is advisable to use the same name. This approach should apply to both consumer and professional products.

The selected chemical names must identify the substances primarily responsible for the major health hazards that 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

¹⁸ The terms used for identification of the mixture and the substances in the mixture must be the same as those used in the safety data sheet.

¹⁹ Please note that Commission Regulation (EU) 2018/669 of 16 April 2018 (11th ATP to CLP) introduces translations of the chemical names of substances subject to harmonised classification and labelling listed in Table 3 of Annex VI to CLP in all languages. The 11th ATP was based on the consolidated text of the CLP Regulation up to the 6th ATP, as in the later ATPs the chemical names are already translated. All other information, apart from the chemical names, remains applicable as stated in the relevant ATPs, in particular that related to classification and labelling, unless an entry has been modified by an ATP that has been adopted after the 6th ATP and is already applicable. The 11th ATP will apply from 1 December 2019 but can be used voluntarily ahead of that date.

four substances present in significant concentrations and contributing to the classification of the mixture for one or several of the hazards mentioned under CLP Article 18(3)(b). As explained in CLP FAQ ID=1050 (available at <https://echa.europa.eu/support/qas-support/qas>), there are no strict rules on how to decide which substances should take precedence to be named on the label, but the following may help in the selection. For non-additive health hazards (e.g. germ cell mutagenicity, carcinogenicity, reproductive toxicity, respiratory or skin sensitisation and specific target organ toxicity categories 1 and 2), all ingredients present in the mixture at or above the generic concentration limit (GCL) or specific concentration limit (SCL) should be considered as "primarily responsible for the major health hazards" within the meaning of Article 18(3)(b) CLP and included on the label. For the additive health hazards mentioned in Article 18 (3)(b) CLP (e.g. acute toxicity, skin corrosion, serious eye damage, specific target organ toxicity category 3 and aspiration hazard), all ingredients present in the mixture at or above the GCL or SCL should be included on the label. However, where there are several ingredients contributing to classification for one hazard endpoint, only the ingredients primarily contributing to the classification, for example, those with the highest concentrations or closest to the GCL or SCL, need to be included on the label, and therefore the names of other ingredients with limited contribution to the classification are not required. In addition, specific labelling rules apply to mixtures containing skin and respiratory sensitisers (see Table 3.4.3 of Annex I to CLP and point 2.8 of Annex II to CLP).

Note that, although the UFI is an element of identification used for the purpose of Annex VIII to CLP, it is not a product identifier within the meaning of CLP Article 18. The UFI is part of the (obligatory) supplemental information (CLP Article 25(7)). Nevertheless specific provisions may apply (see [section 4.8.1.1](#) of this guidance document and the [Guidance on harmonised information relating to emergency health response – Annex VIII to CLP](#)).

The manufacturer, importer or downstream user of certain less hazardous substances contained in a mixture may conclude that disclosing substance identifiers that are required for the label or the SDS can put the confidential nature of his business or intellectual property rights at risk. In such cases, he may submit a request to ECHA to be granted permission to use an alternative chemical name in accordance with CLP Article 24. The alternative name should be a more general name identifying the most important functional groups or an alternative designation. The conditions under which the use of an alternative name may be granted are given in Part 1, section 1.4 of Annex I to CLP.

The above requests are subject to a fee, in accordance with Article 3 of Commission Regulation (EU) No 440/2010 (the Fee Regulation). Where the request is submitted by a micro, small or medium-sized enterprise (SME)²⁰, ECHA will levy a reduced fee as set out in Article 24(2) and Annex I to the Fee Regulation.

For more information on how to request the use of an alternative chemical name for a substance in a mixture, please follow the technical instructions set out in the manual on preparation of REACH and CLP dossiers: [How to prepare a request for use of an alternative chemical name for a substance in a mixture](#). It is also advised to visit the following section on the ECHA website: <https://echa.europa.eu/support/dossier-submission-tools/reach-it/requesting-an-alternative-chemical-name-in-mixtures>.

²⁰ SME is defined in Commission Recommendation 2003/361/EC.

4.3 Hazard pictograms

4.3.1 General information

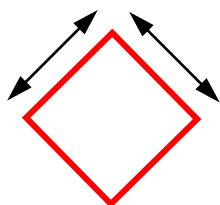
A hazard pictogram is a pictorial presentation to communicate information on the hazard concerned (see also the definition provided in CLP Articles 2(3) and 31(2)). According to CLP Article 19, the classification of a substance or mixture determines the hazard pictograms that have to be displayed on a label. Information on the assignment of hazard pictograms to specific hazard classes and categories/differentiations can also be found in Annex V to CLP.

Currently, there are nine different pictograms. While normally only one pictogram is assigned to an individual hazard class or category, a few hazard differentiations have to carry two pictograms, namely substances and mixtures classified as self-reactive Type B or as organic peroxide Type B (see also the below sections). It should also be noted that some pictograms cover several hazard classes and categories.

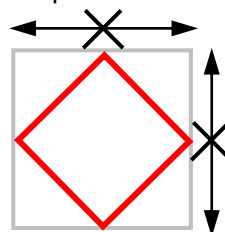
4.3.2 Shape, colour and dimensions

The colour and presentation of a label must allow the hazard pictogram and its background to be clearly visible. Hazard pictograms must be in the shape of a square set at a point, i.e. they must appear as a diamond shape when the label is read horizontally, and must have a black symbol on a white background with a red frame (see section 1.2.1 of Annex I to CLP). The exact type of red, i.e. the Pantone colour number, is not defined, and labellers are free to use their discretion.

Each hazard pictogram must cover at least one fifteenth of the minimum surface area of the label dedicated to the information required by CLP Article 17, but the minimum area of the pictogram must not be less than 1 cm². The minimum dimensions of labels and pictograms are given in Table 1.3 of Annex I to CLP. For pictograms, these minimum dimensions refer to the sides of the red frame of the pictogram itself, and not to the sides of the virtual square within which the pictogram is placed:



Correct measurement



Wrong measurement

Below is the exclamation mark (pictogram GHS07) as an example pictogram. It is assigned to various health hazard classes and categories of lower severity (see Part 2 of Annex V to CLP):



Printable pictograms are provided free of charge for download at <http://www.unece.org/trans/danger/publi/ghs/pictograms.html>.

4.3.3 Precedence rules

For substances and mixtures classified for more than one hazard, several pictograms may be required on the label. In such cases, the applicability of the precedence rules set out in CLP Article 26 need to be checked. As a general rule, the pictograms that reflect the most severe hazard category of each hazard class must 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)).

Further to this, the CLP Regulation sets out precedence rules relating to particular hazard 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 ...



mandatory



optional



optional

... except in cases where more than one pictogram is compulsory, namely for substances and mixtures classified as self-reactive Type B or as 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 optional²¹:



mandatory

or



mandatory



optional

- **For health hazards**, if the label carries the pictogram GHS06 (skull and crossbones), then GHS07 (exclamation mark) must not appear:



²¹ This precedence rule was introduced by the Commission Regulation (EU) No 286/2011 of 10 March 2011 (2nd ATP to the CLP Regulation).

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



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

- **For health hazards**, if the label carries the pictogram GHS08 (health hazard) for respiratory sensitisation, then GHS07 (exclamation mark) must not be used for skin sensitisation or for skin or eye irritation ...



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

In case a substance or mixture is assigned the supplemental hazard statement EUH071 ("Corrosive to the respiratory tract"), a corrosivity pictogram (GHS05) may be assigned (see Note 1 of Table 3.1.3 in Annex I to CLP). Where this is done, the pictogram GHS07 (exclamation mark) for STOT SE category 3 (respiratory tract irritation) must be omitted from the label, as well as the hazard statement H335 ("May cause respiratory irritation").

For substances and mixtures that have to be labelled in accordance with both the CLP Regulation and the rules on the transport of dangerous goods, the CLP pictogram(s) may be omitted from the label on the outer or single packaging when the CLP pictogram(s) and the pictogram(s) for transport of dangerous goods relate to the same hazard (see [section 5.4](#) of this guidance document).

4.3.4 Blank pictograms

When preparing hazard labels, a common practice is to use pre-printed label stocks of the diamonds (the label background is printed first before it is overprinted with the specific label information). This may result in labels with a number of pre-printed empty diamonds, not all of which may then be needed by a company that has purchased pre-printed labels. In such a situation, one or more pre-printed diamonds may have to be left empty.

The CLP Regulation does not explicitly forbid blank diamonds. However, any information given in addition to the minimum mandatory labelling must not contradict or cast doubt on the mandatory label information (CLP Article 25(3)), while empty red frames might raise questions. If empty red frames are unavoidable, it is recommended to cover them up with a solid overprint which blacks them out completely (see the example in Figure 1).

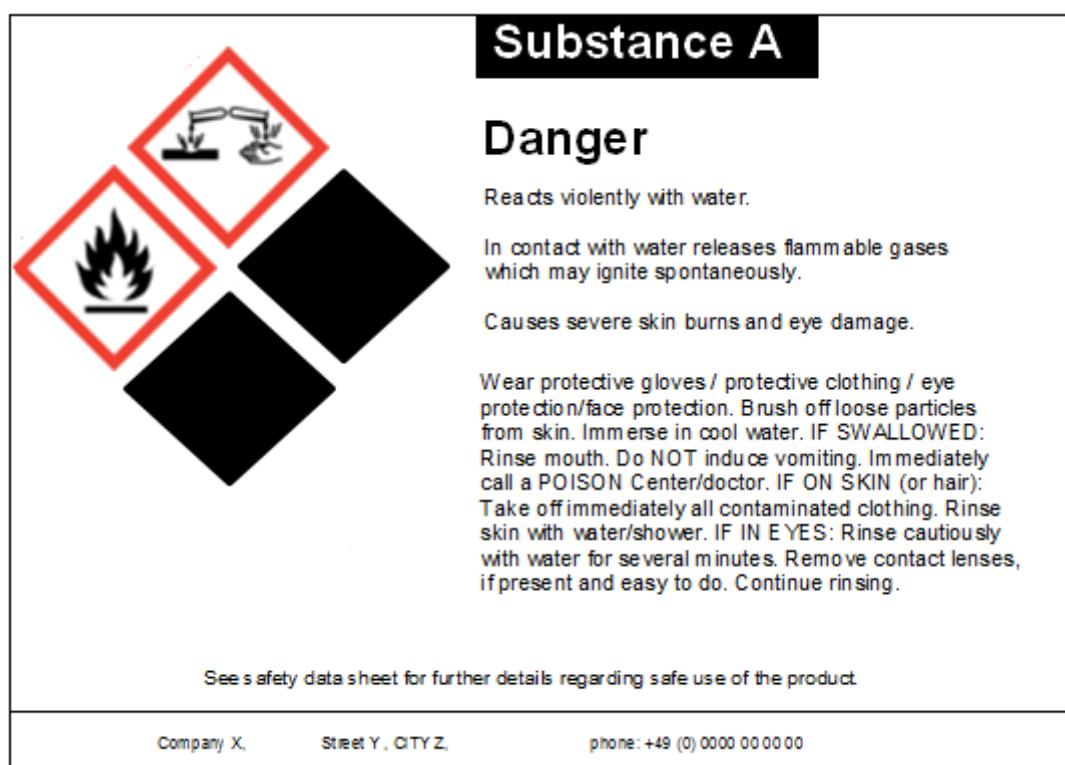


Figure 1: Blackened out empty diamonds

Blackening-out of empty diamonds aims to avoid the impression that relevant hazard symbols may have been left off the label through a printing mistake.

Please refer also to CLP FAQ ID=240 available at <https://echa.europa.eu/support/gas-support/gas>.

4.4 Signal words

A signal word indicates the relative level of severity of a particular hazard. The label must include the relevant signal word in accordance with the classification of the hazardous substance or mixture: more severe hazards require the signal word 'Danger' while less severe hazards require the signal word 'Warning' (see CLP Article 20).

The signal word relevant for each specific classification is set out in the tables indicating the label elements required for each hazard class as set out in Parts 2 to 5 of Annex I to CLP. Some hazard categories, like explosives, division 1.6, do not have a signal word.

Where a substance or mixture is classified for more than one hazard, the label must only bear one single signal word. In such cases, the signal word 'Danger' takes precedence and the signal word 'Warning' must not appear.

4.5 Hazard statements

CLP hazard labels must also bear the relevant hazard statements describing the nature and severity of the hazards of a substance or mixture (see CLP Article 21).

The hazard statements relevant for each hazard class and category/differentiation are set out in the tables contained in Parts 2 to 5 of Annex I to CLP. An example is the

hazard statement H302 (“Harmful if swallowed”) assigned to acute oral toxicity, category 4. The wording for hazard statements is given in Tables 1.1, 1.2 and 1.3 of Annex III to CLP.

In some cases, additional information to complement a hazard statement²² may need to be provided, such as the specification of the route of exposure or of the target organ for certain health hazards, i.e. for the CMR, STOT SE (categories 1 and 2) and STOT RE hazard classes. For example:

- for STOT RE category 1, the hazard statement H372 (“Causes damage to organs through prolonged or repeated exposure”) must be complemented by the organs affected if known and by the route of exposure if it is conclusively proven that no other routes of exposure cause the hazard, e.g. H372 (“Causes damage to the liver through prolonged or repeated dermal exposure”);
- for STOT SE category 1, the route of exposure or the target organ may have to be included in the statement as well, e.g. H370 (“Causes damage to the liver via ingestion”).

For reproductive toxicity, hazard statements H360 (“May damage fertility or the unborn child”) and H361 (“Suspected of damaging fertility or the unborn child”) indicate a general concern. These general hazard statements can be replaced by the hazard statements indicating the specific effect of concern, if known, in accordance with section 1.1.2.1.2 of Annex VI to CLP (e.g. H360F “May damage fertility”, H361d “Suspected of damaging the unborn child”, H360Df “May damage the unborn child. Suspected of damaging fertility”).

If a substance classification is harmonised and included in Part 3 of Annex VI to CLP, the corresponding hazard statement(s) relevant for this classification have to be used on the label. Note that certain harmonised classifications marked with an asterisk in Part 3 of Annex VI to CLP are minimum classifications and, based on available data, a more severe classification as well as the corresponding hazard statement may need to be assigned. Also, hazard statements may need to be included for the non-harmonised parts of the classification of the same substance, i.e. for the hazard classes or differentiations not covered in the Annex VI listing (see CLP Article 4(3)).

Table 1.2 of Annex III to CLP defines which combined hazard statements are allowed²³. Currently, combinations are allowed for acute toxicity hazard statements that relate to different routes of exposure, but to the same category. Such statements can appear on the label and in the SDS, for example for category 3 for the oral and dermal route H301+H311 (“Toxic if swallowed or in contact with skin”).

If a substance or mixture is classified in several hazard classes or differentiations of a hazard class, all hazard statements resulting from the classification must appear on the label, unless there is evident duplication or redundancy (see CLP Article 27). For example, if the hazard statement H314 (“Causes severe skin burns and eye damage”) is assigned, H318 (“Causes serious eye damage”) may be omitted (see also section 3.3.4 of the [Guidance on the application of the CLP criteria](#)). Similarly, if the hazard statement H410 (“Very toxic to aquatic life with long lasting effects”) is assigned, H400 (“Very toxic to aquatic life”) may be omitted (see also section 4.1.6 of the [Guidance on the application of the CLP criteria](#)). Duplication or redundancy should also be avoided for a substance or mixture that is assigned the supplemental hazard statement EUH071

²² Please note that this does not constitute supplemental labelling information in the meaning of CLP Article 25. It is rather additional hazard information that is required to be included within the hazard statement itself, beyond the standardised wording.

²³ Commission Regulation (EU) No 286/2011 of 10 March 2011.

("Corrosive to the respiratory tract")²⁴. In this case, the hazard statement H335 ("May cause respiratory irritation") for STOT SE category 3 (respiratory tract irritation) should be omitted from the label. Please note that the information provided on the hazard label and in Section 2.2 of the SDS, for the same substance or mixture, must be consistent.

The correct wording of the hazard statements as it has to appear on the label is given in Annex III to CLP, in all EU languages. The hazard statements of one language must be grouped together with the precautionary statements of the same language on the label (see [section 3.3](#) of this guidance document).

4.6 Precautionary statements

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

Precautionary statements must be selected in line with the provisions set out in CLP Articles 22 and 28 and with Part 1 of Annex IV to CLP: any selection must take into account the hazard statements used, the intended or identified use(s) of the substance or mixture, as well as the basic instructions specified in the "conditions for use" columns in Tables 6.1 – 6.5 of Annex IV to CLP. Duplication and redundancy should be avoided. 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 must in general²⁵ appear on the label (see CLP Article 28(2)). Normally, not more than six precautionary statements must appear on the label, unless necessary to reflect the nature and the severity of the hazards (see [Example C](#) in [section 7.4](#) of this guidance document).

For assistance with the selection of the most appropriate P-statements, please refer to [section 7](#) of this guidance document.

Part 2 of Annex IV to CLP lists, in all EU languages, the correct wording of the precautionary statements as it must appear on a label. Where there are different translations of P-statements, the translation in the national version of the CLP Regulation usually gives the most relevant wording. The precautionary statements of one language have to be grouped together with the hazard statements of the same language on the label (see [section 3.3](#) of this guidance document).

²⁴ See also Note 1 of Table 3.1.3 in Annex I to CLP.

²⁵ If 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, a P-statement addressing disposal is not required.

4.7 Codes for hazard and precautionary statements

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

- the letter “H” for “hazard statement” or “P” or “precautionary statement”;
- for hazard statements, the first digit designating the type of hazard (2 for physical hazards, 3 for health hazards and 4 for environmental hazards) and the next two digits corresponding to the sequential numbering of hazards, as the codes from 200 to 210 for explosivity, the codes from 220 to 230 for flammability, etc.
- risk phrases carried through from the DSD and DPD, but which are not yet included in the UN GHS, are codified as “EUH”;
- for precautionary statements, a digit reflecting one of the 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 the CLP Regulation are set out in Table 4 below:

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

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

The codes of the hazard and precautionary statements and EUH statements are not necessary for the label. The CLP Regulation only requires the actual phrasing of the applicable statements on the label.

4.8 Supplemental labelling information

CLP Article 25 defines 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. Please note that, according to CLP Article 25(6), supplemental labelling information might be obligatory for a mixture, even if not classified as hazardous.

All ‘supplemental information’ must generally be located in the section for supplemental information on the label. Both obligatory and non-obligatory supplemental information have to appear in the same languages as the other CLP label elements.

As it is obligatory to place this information alongside the label elements required by CLP Article 17(a) to (g), these supplemental label elements need to be considered carefully as to the location and the space they need when preparing a CLP label for a substance or mixture (see also [Example 3](#) under [section 6](#) of this guidance document).

Commission Regulation (EU) 2017/542 amended CLP to include the requirement for a Unique Formula Identifier (UFI) as supplemental information on the label under Article 25(7) (see [section 4.8.1.1](#) of this guidance document)²⁶. However, there are no fixed rules concerning the positioning of the UFI on the label: it can either be located in the section for 'supplemental information' on the label, as described above, or be placed (with the "UFI:" marker) in proximity of the product name or trade name. For practical reasons, the UFI could also be printed on the packaging, as long as it remains in proximity of the other labelling information. In any case, the UFI should be clearly visible and easy to locate in case of an emergency (its main function is to help the emergency responder in the identification of the mixture contained in the product).

Obligatory supplemental information, when included, must be easy to identify and read. Naturally, it has precedence over any non-obligatory supplemental information if space on the label is limited.

4.8.1 Obligatory supplemental labelling information

Obligatory supplemental labelling information includes:

- Supplemental hazard statements relating to particular physical and health properties. These are codified as "EUH" statements, e.g. EUH014 "Reacts violently with water". For some substances with harmonised classifications, the supplemental hazard statements are included in Part 3 of Annex VI to CLP;
- Supplemental statements for certain mixtures, e.g. EUH204 "Contains isocyanates. May produce an allergic reaction" (see Part 2 of Annex II to CLP). These phrases are assigned EUH codes as well, to align their presentation with the above supplemental hazard statements;
- The supplemental statement EUH401 "To avoid risks to human health and the environment, comply with the instructions for use" for hazardous substances and mixtures within the scope of Directive 91/414/EEC²⁷ (see Part 4 of Annex II to CLP);
- Label elements resulting from other EU acts (see CLP Article 32(6)), for example:
 - the authorisation number requested by the REACH Regulation;
 - the listing of surfactants and perfumes according to the Regulation (EC) No 648/2004 on detergents, as amended;
 - the authorisation number of the biocidal product according to the Biocidal Products Regulation (EU) No 528/2012;

²⁶ Commission Regulation (EU) 2017/542 (as amended by Commission Delegated Regulation (EU) 2020/11) also amended the CLP Regulation by adding Annex VIII.

²⁷ Repealed and replaced by 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 with effect from 14 June 2011.

- the labelling provisions (i.a. flammability) of the Aerosol Dispensers Directive 75/324/EEC (ADD), as amended; or
- the content of volatile organic compounds (VOCs) in accordance with Directive 2004/42/EC²⁸.

Further additional obligatory information can include:

- Specific response information as referred to in the brackets of the precautionary statements P320 “Specific treatment is urgent (see ... on this label)”, P321 “Specific treatment (see ... on this label)” in Annex IV to CLP, e.g. “see supplemental first aid instructions on this label” or “see supplemental instructions on the administration of antidotes on this label”. See also Table 5 below and the selection tables in [section 7.3](#) of this guidance document;
- For mixtures containing components of unknown acute toxicity at a concentration of 1% or greater, the statement “x percent of the mixture consists of component(s) of unknown acute toxicity” (see section 3.1.3.6.2.2 of Annex I to CLP). This statement has also to be included in the SDS, when this is provided²⁹. In addition, it may be appropriate to differentiate the hazard based on the route of exposure, for example “x percent of the mixture consists of ingredient(s) of unknown acute (oral/dermal/inhalation) toxicity”, in particular where the substance is also classified for other hazards and where it is important to specify the route of exposure (see also the [Guidance on the application of the CLP criteria](#));
- For mixtures for which no useable information on the short-term (acute) and/or long-term (chronic) aquatic hazard is available for one or more of the relevant components, the statement “Contains x percent of components with unknown hazards to the aquatic environment” (see section 4.1.3.6.1 of Annex I to CLP). This statement has to be included on the label and in the SDS;
- For mixtures subject to submission requirements under CLP Article 45 and Annex VIII to CLP, a UFI, where applicable (see [section 4.8.1.1](#) of this guidance document).

The CLP Regulation requires supplemental label information to be located in a specific supplemental information section on the label. A supplier may also choose to place the supplemental information in several locations, taking into account the requirements of CLP Article 25 (see [Example 3](#) and [Example 5](#) in [section 6](#) of this document).

Similarly, the section for supplemental label information should be visibly separated from the labelling elements according to CLP Article 17(a) to (g), e.g. by placing it in another section of the label, by putting it in a text box, using a different colour or using a different letter size. However, 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 another legislation, where the latter supports the safe handling and use of a substance or mixture. For example, where additional EUH statements express a warning similar to that contained in the hazard statements that

²⁸ Directive 2004/42/EC of the European Parliament and of the Council of 21 April 2004 on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain paints and varnishes and vehicle refinishing products and amending Directive 1999/13/EC.

²⁹ For further information on the compilation of the SDS, please consult the [Guidance on the compilation of safety data sheets](#).

reflect a classification, it is even advisable to group both types of statements together on the label so that they reinforce each other. For example, for a substance that is classified as water-reactive category 1, the hazard statement EUH014 "Reacts violently with water." is very similar to H260 "In contact with water releases flammable gases which may ignite spontaneously." (see also [Example 4](#) in [section 6](#) of this guidance document).

In relation to readability, obligatory labelling information required by other EU legislation (e.g. the content of volatile organic compounds as required by Directive 2004/42/EC or the listing of specified constituents as required by Regulation (EC) No 648/2004) must not be treated differently from other obligatory labelling information required by the CLP Regulation itself. Obligatory information must be easy to identify and read and must take precedence on the CLP label over any other non-obligatory supplemental information. An overview of the obligatory supplemental label elements to be included in the section for supplemental information on the label is provided in Table 5.

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	a) Supplemental hazard statements relating to certain physical properties of substances and mixtures. They need to be assigned in accordance with the conditions specified in Annex II to CLP when a substance or mixture has already been classified on the basis of the criteria in Annex I to CLP. For some substances with harmonised classifications, supplemental hazard statements are included in Part 3 of Annex VI to CLP.	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	b) Supplemental hazard statements relating to health properties of substances and mixtures. They need to be assigned in accordance with the conditions specified in Annex II to CLP, Part 1, section 1.2, when a substance or mixture has already been classified on the basis of the criteria in Annex I to CLP. For some substances with harmonised classifications, supplemental hazard statements are included in Part 3 of Annex VI to CLP. For EUH071, see also Annex I to CLP, Table 3.1.3, Note 1.	EUH029	'Contact with water liberates toxic gas'

Legal Reference	Type and Applicability	Code	Content / Phrasing
		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 mixtures. They need to be assigned to mixtures in accordance with the conditions specified in Annex II to CLP, Part 2.		
	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 \leq 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 ³⁰	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 Annex IV	Substances and mixtures assigned the precautionary statements: <ul style="list-style-type: none"> • P320 - Specific treatment is urgent (see ... on this label) • P321 - Specific treatment (see ... on this label) 		Supplemental first aid instruction (e.g. administration of an antidote or immediate measures such as specific cleansing agent) referred to in the brackets of the precautionary statements

³⁰ According to the last paragraph of Section 2.8 of Annex II to CLP (introduced by Commission Regulation (EU) No 286/2011 (2nd ATP to the CLP Regulation)), *mixtures classified as sensitising* containing other substance(s) classified as sensitising (in addition to the one that leads to the classification of the mixture) and present in a concentration equal to or greater than that specified in Table 3.4.6 of Annex I to CLP must bear the name(s) of that/those substance(s) on the label. This (these) name(s) should be placed together with the name(s) of the substance(s) relevant to classification of the mixture. Note that EUH208 must be used when a *mixture not classified as sensitising contains sensitising substances*. However, according to Commission Regulation (EU) 2016/918 (8th ATP to the CLP Regulation), where a mixture is labelled with EUH204 in accordance with Section 2.4 of Annex II to CLP or EUH205 in accordance with Section 2.5 of Annex II, the statement EUH208 may be omitted from the label when the only substances triggering EUH208 are isocyanates or epoxy constituents.

Legal Reference	Type and Applicability	Code	Content / Phrasing
CLP 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 acute toxicity' (also for safety data sheet)
CLP Annex I, section 4.1.3.6.1	Mixture where no useable information on the short-term (acute) and/or long-term (chronic) 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)
CLP Article 25(2)	Supplemental statement for substances and mixtures within the scope of Directive 91/414/EEC ³¹	EUH401	'To avoid risks to human health and the environment, comply with the instructions for use'.
Label elements resulting from other Community acts pursuant to CLP Article 32(6)	<p>Examples:</p> <ul style="list-style-type: none"> ★ Regulation (EC) No 1907/2006 (REACH) ★ Regulation (EC) No 648/2004 (detergents) ★ Directive 75/324/EEC on aerosol dispensers (ADD) ★ Directive 2004/42/EC on volatile organic compounds (VOCs) ★ Biocidal Products Regulation (EU) No 528/2012 		<ul style="list-style-type: none"> ★ authorisation number ★ labelling statements related to restrictions in Annex XVII of REACH, e.g. 'Restricted to professional users' ★ listing of specified constituents such as anionic surfactants, oxygen bleaching agents, enzymes, disinfectants, optical brighteners and perfumes ★ i.a. flammability labelling ★ content of volatile organic compounds ★ for example: authorisation number of the biocidal product

³¹ Repealed by 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 with effect from 14 June 2011.

Legal Reference	Type and Applicability	Code	Content / Phrasing
CLP Article 25(7) and Annex VIII Part A, point 5 ³²	Unique formula identifier (UFI) for mixtures classified for health or physical effects and subject to submission requirements following CLP Article 45 (see section 4.8.1.1 of this guidance document)	n/a	Unique 16-digit alphanumeric code ³³ , for example: UFI: VDU1-414F-1003-1862

4.8.1.1 Unique formula identifier (UFI)

A Unique Formula Identifier (UFI) is a unique alphanumeric code that links the information on a mixture submitted under CLP Article 45 to a specific product placed on the market (for further information, see ECHA’s Poison Centres website at: <https://poisoncentres.echa.europa.eu/>).

The UFI is mandatory for all hazardous mixtures that require the submission of information according to CLP Article 45, i.e. all the mixtures that are placed on the EU market and classified under CLP as hazardous based on their health or physical effects. Importers and downstream users are duty holders under Article 45 and are required to include the UFI on the label of the mixture before placing it on the market. Distributors may also have obligations under CLP Article 4(10), see section 3.1 of the [Guidance on harmonised information relating to emergency health response – Annex VIII to CLP](#). Certain exemptions apply, more details are given in the same section of that guidance.

The UFI is considered as obligatory supplemental labelling information according to Article 25(7) of the CLP Regulation, and should be included in the label section dedicated to supplemental information. However, by way of derogation from Article 25(7) of the CLP Regulation, Article 29(4a)³⁴ allows to include the UFI in another way. The different options are specified in Part A Section 5 of Annex VIII. Hence, while normally supplemental labelling information should be located in the section for ‘supplemental information’ on the label, the UFI can alternatively even be placed outside the label, by being printed or affixed directly onto the inner packaging. The UFI must however be located with the obligatory CLP label elements such as the product identifiers or hazard information. The UFI should be clearly identifiable³⁵. Where a UFI is added separately to a label or packaging, the person responsible should ensure that it remains firmly attached during normal handling and use.

When the inner packaging is in such a shape or so small that it is not possible to affix the UFI on it, then the label elements including the UFI should be provided either on fold-out labels, or tie-on tags, or an outer packaging (in accordance with section 1.5.1 of

³² See Commission Regulation (EU) 2017/542.

³³ For more information, see the [User guide for the UFI generator](#) and the ECHA Poison Centres website at <https://poisoncentres.echa.europa.eu/publications>.

³⁴ Regulation (EU) 2020/11 amended CLP by adding the new paragraph 4a to Article 29 (Exemption from labelling and packaging requirements).

³⁵ See specific section 5.3.1.1. for specific cases when the use of fold-out labels and tie-on tags are allowed.

Annex I to CLP, see section 5.3.1 of this guidance document), always with the other label elements.

It should be noted that although CLP considers the UFI as supplemental information, it is included in Section 1.1 (product identifier) of the SDS, in accordance with Annex II to REACH, where applicable. Please note that the inclusion of the UFI in the SDS is only required in specific cases, otherwise it is voluntary, see section 4.2 of the [Guidance on harmonised information relating to emergency health response – Annex VIII to CLP](#)).

The UFI code must be preceded by the acronym "UFI:", i.e. in capital letters, followed by a colon.

The UFI must be clearly visible, legible and indelibly marked (see [section 5.2](#) of this guidance document where legibility, readability and size of the label elements are described).

For mixtures not yet notified under national legislation, the use of a UFI will apply from 1 January 2021, in a stepwise manner, depending on the use of the mixture (see section 3.4.1 of the [Guidance on harmonised information relating to emergency health response – Annex VIII to CLP](#) for more details on the compliance dates). If there is a need to update an existing notification, please see section 3.5.2 of the [Guidance on harmonised information relating to emergency health response – Annex VIII to CLP](#).

For mixtures already notified under the national schemes do not need to be re-labelled for the purpose of including a UFI until **1 January 2025**. However, if a submission update is needed before that date, e.g. the mixture composition changes in accordance with certain criteria (reasons for update are listed in Section 4.1, Part B of Annex VIII, see further details in section 4.2.7 of [Guidance on harmonised information relating to emergency health response – Annex VIII to CLP](#)), the company is required to comply with the Annex VIII requirements and to re-label its mixtures with the UFI codes or affix the UFI codes to the label (or on packaging right next to other obligatory CLP label elements) before placing the mixtures, as changed, on the market. If a company voluntarily submits the information in accordance with Annex VIII to CLP ahead of the applicable deadline³⁶, it is recommended to include the UFI on the label without undue delay.

Please note that:

- For hazardous mixtures that are subject to the submission of information under CLP Article 45, the UFI needs to be reflected on the label or on the packaging located with other obligatory CLP labelling information.
- For hazardous mixtures used at industrial sites³⁷, the UFI may alternatively be indicated in Section 1.1 of the SDS.

³⁶ The readiness of each appointed body to receive the submission in the new format should be checked with the relevant authority. ECHA has published on the Poison Centres website an Overview of Member States decisions on implementing Annex VIII (at <https://poisoncentres.echa.europa.eu/echa-submission-portal>).

³⁷ Regardless of its possible inclusion downstream in mixtures intended for professional or consumer uses.

- For hazardous mixtures sold unpackaged³⁸, the UFI must be indicated in Section 1.1 (product identifier) of the SDS in accordance with Annex II of REACH³⁹.
- For hazardous mixtures listed in Part 5 of Annex II to CLP the UFI must be included in a copy of the label elements provided for in Article 29(3), e.g. attached to the delivery note.
- For hazardous mixtures used for scientific research and development (SR&D), or for product and process oriented research and development, a UFI is not required as they are outside the scope of Annex VIII.
- For mixtures classified as 'gases under pressure' and/or 'explosives (unstable explosive and Divisions 1.1 to 1.6)' only, a UFI is not required as these hazard classes are outside the scope of Annex VIII.
- For mixtures classified as hazardous to the environment only, a UFI is generally not required as these hazard classes are outside the scope of CLP Article 45. However, companies can voluntarily make a submission and include a UFI on the label and are recommended to do so.
- In the case of multi-layered packaging, the UFI is allowed to be included on the inner packaging only (by way of derogation from Article 25(7) of the CLP), on the label or on the packaging located with the obligatory CLP label elements;
- A company may consider making submissions for mixtures that are outside the scope of CLP Article 45 (for example, hazardous for the environment only). In that case, the UFI may voluntarily be submitted and put on the label of these mixtures (and it is recommended).

An online tool to create and validate UFI codes, the UFI Generator, is available on the Poison Centres website at <https://poisoncentres.echa.europa.eu/ufi-generator>. More information and Manuals are available at <https://poisoncentres.echa.europa.eu/ufi-generator>.

4.8.2 Non-obligatory supplemental labelling information

In some cases, suppliers may need to include certain elements on the label that are not obligatory but are necessary for the handling and use of the product, for example specific product information, basic instructions for use or P-statements that do not arise directly from the classification of the product (e.g. "Read label before use" or "Do not get in eyes" for eye irritant mixtures). Such non-obligatory supplemental labelling information, the content of which is at the discretion of the supplier, is not part of the labelling requirements under the CLP Regulation.

³⁸ e.g. mixtures listed in Part 5 of Annex II to CLP.

³⁹ Please note that CARACAL has endorsed the interpretation that no default requirement to place the UFI in the SDS (except for hazardous unpackaged mixtures) is needed. The Annex II to REACH is currently under revision. The final text should be published later in 2020.

The need for non-obligatory information should also be taken into account when deciding how to lay out the label. The non-obligatory supplemental information may also be placed alongside the label elements required in CLP Article 17(a) to (g) and the obligatory supplemental information, when applied. However, such information must not be confusing to the user or contradict the obligatory label elements. It should also provide further necessary details (see CLP Article 25(3)).

Additional labelling elements that come from the UN GHS but are not implemented in the CLP Regulation may be included in the section for non-obligatory supplemental information. These elements must not confuse the user.

In addition, any non-obligatory supplemental information, either included on the label or on the packaging, must be consistent with the classification of the substance or mixture (see CLP Article 25(4)). This means that statements such as 'non-toxic', 'non-polluting' or 'ecological', or other statements suggesting that the substance/mixture is not hazardous or statements that are incompatible with the assigned classification must not appear on the label or packaging of a classified substance or mixture.

5. Guidance on particular aspects of CLP hazard labelling

5.1 Further aspects to consider for the CLP hazard label

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

- **Label size:** the CLP Regulation defines minimum dimensions for the size of the label and some of its elements (see [section 5.2](#) of this guidance document);
- **Specific labelling rules** that refer to specific labelling and packaging situations, for example:
 - a substance or mixture is contained in **awkwardly shaped or small packaging** (see CLP Article 29),
 - **the packaging consists of multiple layers**, and/or
 - a substance or mixture is subject to the labelling provisions of the CLP Regulation and to **labelling provisions in accordance with the rules on the transport of dangerous goods** according to the UN Recommendations on the Transport of Dangerous Goods – Model Regulations (the so-called "Orange Book")⁴⁰. The person responsible for compiling a CLP label needs to consider all of these rules before making a final decision on the label of the substance or mixture (see CLP Article 33);
- **Selection of precautionary statements:**
The selection of the most appropriate set of precautionary statements for the label is largely at the discretion of the supplier. Please refer to [section 7](#) of this guidance document.

⁴⁰ Implemented in the EU through international modal agreements and Directive 2008/68/EC.

5.2 Size of the label and of the label elements

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 (see also Table 6 below)⁴¹. Nevertheless, the label should be large enough to contain all the label elements defined by the CLP Regulation while remaining legible. As a result, the label may need to be larger than the minimum area specified.

Table 6: Minimum dimensions of labels and pictograms under the CLP Regulation

Capacity of the package	Dimensions of the label (in millimetres) for the information required by CLP Article 17	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

The CLP Regulation requires that the label elements as referred to in CLP Article 17(1) be of such size and spacing as to be easily read.

Readability is determined by the combination of font size, letter spacing, spacing between lines, stroke width, type colour, typeface, width-height ratio of the letters, the surface of the material and significant contrast between the print and the background.

Some examples of the influence of these parameters on readability are shown in Figure 2 below.

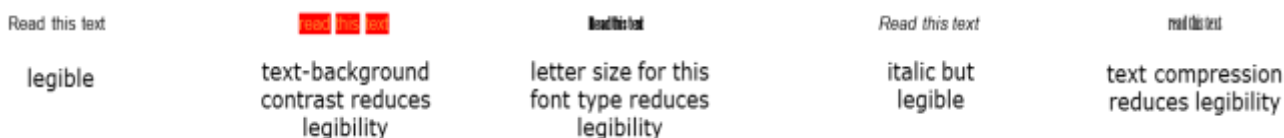


Figure 2: Readability

A label may accommodate more language(s) than those required by the Member State where the substance or mixture is placed on the market. As long as the label complies with the (minimum) dimensions set out in Table 6 above and as long as legibility of the

⁴¹ The size of the pictogram relates here to the dimensions of the pictogram itself, and not to the size of the virtual square into which the pictogram is placed.

text elements is warranted, the decision on the number of languages is at the discretion of the respective supplier.

The exact **size of the letters** of the signal words, hazard statements, precautionary statements and any supplemental information is not further defined in the legal text, i.e. it is up to the supplier to determine the size of the letters that allows the label elements to be easily read. However, the minimum letter size of 1.2 mm ('x-height') can be used as a reference. A supplier may decide whether to increase the letter size with the overall volume of the packaging and dimensions of the label, or to fix it more or less for all volumes and labels.

Similarly, a supplier may decide whether to have larger letter sizes for certain label elements while others are presented in smaller letters. Some practical options often chosen are for example:

- providing the signal word "Danger" or "Warning" in larger letters on the label than for the hazard and precautionary statements,
- presenting the obligatory label elements in larger letters than for the non-obligatory labelling information.

Both of the above-mentioned options are in principle compatible with the CLP legal text as long as the obligatory information on the label can be easily read.

The CLP Regulation links the **size of the hazard pictograms** to the minimum dimensions of the label. Each hazard pictogram must cover at least one fifteenth of the minimum surface area of the label dedicated to obligatory labelling information. The minimum dimensions of labels and pictograms are given in Table 1.3 of Annex I to CLP. The area of the pictogram for the smallest capacity of the package should be at least 16 mm x 16 mm, if possible, but must never be less than 1 cm². The pictogram size should be increased from the minimum dimensions where the actual label size allows this. The idea behind this is that the label size and the size of the pictograms should remain proportional to the size of the packaging.

A pictogram covering one fifteenth of the minimum surface area, obtained by multiplying the dimensions as defined in Table 1.3 of Annex I to CLP, is considered to be legible. The pictogram size has to be increased in all cases where it occupies less than one fifteenth of the surface area of the label dedicated to the obligatory labelling information. For small packaging, one fifteenth of the minimum size label is 16 mm x 16 mm. However, sometimes even the minimum label size cannot be applied or the minimum size label can only accommodate 10 mm x 10 mm pictograms (e.g. due to several pictograms). These 1-cm² pictograms are the smallest allowed and can be used only if there is no space for the larger ones. A pictogram of at least 16 mm x 16 mm must always be used if possible. "*If possible*" refers to the size of the label and thus if the label size allows for a larger pictogram, then this must be used. However, where a supplier chooses to use a label that is larger than the minimum dimensions for a certain capacity of the package, it is not necessary to increase also the size of the pictogram, provided it covers one fifteenth of the relevant minimum dimensions.

Example:

For a container of a capacity > 50 litres, but ≤ 500 litres, the minimum size of a pictogram must be 32 mm x 32 mm, which is one fifteenth of the area obtained by multiplying the minimum dimensions (105 mm x 148 mm). (105 mm x 148 mm = 10.5 cm x 14.8 cm = 155.5 cm². Then one fifteenth of 155 cm² = 10.36 cm²; $\sqrt{10.36 \text{ cm}^2} = 3.22 \text{ cm} = 32.2 \text{ mm}$ (rounded to 32 mm) for each dimension of each pictogram). If the size of the label increases while the capacity of the container remains the same (>50 litres, but ≤500 litres) the minimum size of each pictogram

should be at least one fifteenth of the minimum area related to obligatory information required by CLP Article 17, i.e. 32 mm x 32 mm.

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 must be given to the obligatory label elements and any obligatory supplemental information required by the CLP Regulation and other EU legislation. If a supplier chooses to add non-obligatory supplemental label elements, legibility may be affected when more than just a small amount of such information is added. For larger amounts of non-obligatory information the supplier should consider limiting this information or increasing the size of the label. When the size of the label is increased, the supplier should also consider increasing the size of the different obligatory label elements. This should serve the purpose of facilitating their identification and maintaining their legibility.

Any additional area gained by increasing the size of the label can be used for further information which is considered important by the supplier. However, this should be weighed against the requirement of CLP Article 25(3), namely that non-obligatory supplemental information must not make it more difficult to identify the obligatory label elements.

5.3 Exemptions from the labelling and packaging requirements

Not all packages allow the necessary labelling information on the label or on the packaging to be displayed in line with the requirements of CLP Article 31.

CLP Article 29(1) and section 1.5.1 of Annex I to CLP provide derogations for a packaging that is so small or in such a shape or form that it is impossible to meet the requirements of CLP Article 31.

If the provisions of Article 29(1) cannot be applied, CLP Article 29(2) and section 1.5.2 of Annex I to CLP allow the omission of certain label elements (see [section 5.3.2](#) of this guidance document).

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

The packaging of a substance or mixture can be so small or in such a shape or form that it is impossible to display the label elements in line with the requirements of CLP Article 31. This could be either because the Member State where the substance or mixture is being placed on the market requires more than one language on the label, or simply because the packaging is too small or difficult to label because of its form/shape so that the full range of labelling elements even in a single language cannot be displayed.

In particular, it may be impossible for the label to be read horizontally when the package is set down normally or the label elements are of insufficient size and spacing as to be easily read.

In this situation the label elements defined in CLP Article 17 may be provided either on:

- fold-out labels; or
- tie-on tags; or
- outer packaging.

When one of the above-mentioned alternatives is used, the label on any inner packaging or the part of the fold-out label that is directly attached to the packaging must 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. In this case, the signal word, the hazard and precautionary statements as well as the supplemental label information may be omitted. However, the use of these alternatives is not allowed if a label becomes unreadable only because the supplier wishes to add more languages on a label than are required in the Member State where the substance or mixture is placed on the market.

5.3.1.1 Fold-out labels and tie-on tags

When a supplier recognises the need to use fold-out labels or tie-on tags, he should consider the following aspects:

General requirements for fold-out labels and tie-on tags

The CLP Regulation does not foresee any separate provisions for tie-on tags or fold-out labels. Both types of label must meet the same performance standards as any other "normal" label, namely:

- the label elements (including the UFI, if applicable) must be indelible, easy to read and stand out from the background;
- the size of the pictograms must be the same as the pictograms on the equivalent, normal label.

The fold-out label or tie-on tag must be securely attached to the packaging, i.e. the label remains attached to the packaging during reasonably expected handling of the package.

At least the following CLP information must be firmly attached to the immediate container:

- hazard pictograms,
- the product identifier,
- the name and telephone number of the supplier of the substance or mixture.

In addition, the UFI should be attached to the immediate container.

Compared to tie-on tags, the use of fold-out labels will probably be the preferred option as this will offer most space for the label elements in many cases. Some information relating to the content, quality and design of a fold-out label is given below. See also [Example 6](#) of this guidance document where a multilingual, fold-out label for a mixture for supply and use is presented.

Fold-out labels can also be an option (and are in fact commonly used) when the amount of obligatory supplemental labelling information required by other legislation would result in a label that is too large for the packaging. Fold-out labels may help clearly structure the labelling information by using different pages for different types of information (see below).

Content, quality and design of a fold-out label

Content

A fold-out label generally consists of three parts, namely the front page (top leaf), inside page(s) and the back page (firmly attached to the packaging).

The label elements and information required by CLP Articles 17 and 32(6) should be

included on the fold-out label as described below. In accordance with CLP Article 29(1), the labelling information can only be provided using fold-out labels when it is not possible to meet the requirements of CLP Article 31 for a label in the languages of the Member State in which the substance or mixture is placed on the market.

- The **front page** must contain at least:
 - the product identifier (CLP Article 18(2) for substances, CLP Article 18(3)(a) for mixtures); Please note that for mixtures, the product identifier on the front and back page does not need to specify all the components contributing to the classification of the mixture;
 - hazard pictogram(s) (CLP Article 17(1)(d));
 - signal words in all languages of the label (CLP Article 17(1)(e));
 - nominal quantity (packages made available to the general public, unless specified elsewhere in the package) (CLP Article 17(1)(b));
 - contact details of supplier(s) (name, address and phone number) (CLP Article 17(1)(a));
 - a reference to the full safety information inside the fold-out label, for example: “*safety information, see inside*” in all languages of the label or a symbol to inform a user that the label can be opened and to illustrate that additional information is available on inside pages (not in CLP Article 17(1));
 - an abbreviation of the language (country code or language code) for all the languages that are used in the inside pages; to avoid non-standard or confusing abbreviations it is recommended to use the language code according to e.g. ISO 639-1;

- **Inside page(s)** should contain:
 - full labelling information (except for the hazard pictogram and the supplier identification) as required by CLP Article 17(1) (including supplemental information) for each language mentioned on the front page and grouped by language, for example one language per page;
 - an abbreviation of the language featured at the top of each of the inside pages (country code or language code).

- The **back page** should repeat the information given on the front page, except for the indication of the different languages in the inner layers.

Regarding the UFI, it is advised to include it on the back page (i.e. attached to the immediate container) or affixed directly to the inner packaging right next to the other labelling elements. This will allow the identification of the UFI in case when the other pages of the fold-out label would for some reason no longer be attached. In addition, it is recommended to include the UFI also on the front page to be easily identifiable.

The use of several UFI codes on the same label is not recommended. A single UFI put on the label should be notified in all MSs where the mixture is on the market. There is always a possibility to notify a mixture in a “new” MS with a same “old” UFI which is already notified in another MS, and this approach is highly recommended, giving possibility to

include only one UFI on the label. However, if different UFIs are used for different market areas, the UFIs (with a country code in proximity) should be included in the inside pages with the language or market area. The UFI relevant for each market area should be clearly identifiable. It should be noted that no additional marker than "UFI:" should appear before the actual UFI code. In exceptional circumstances, when the same label is used in different countries where different UFIs are used, a country code should be used in proximity of the UFI code.

Quality and design

There is no standard specified in CLP for label materials and performance of fold-out labels. However, sufficient quality of the fold-out label needs to be ensured.

The exact manner in which this quality is ensured should be left to the discretion of the supplier, but attention should be paid to the following aspects:

- **Durability**

Taking into account the different situations that may occur during normal handling and use of the packaging (the contents of the package may dissolve the printing or the users may read the label several times), it is clear that the fold-out label must be sufficiently durable to maintain its functionality under repeated use conditions (as applicable) for the entire life span of the product. This can be achieved for example by protective coating of the label and using plasticised pages.

The back page of a fold-out label should be firmly attached to the packaging to resist normal handling and use. The pages should not be easily detachable from each other.

- **Readability**

The information in the fold-out label should be easily read (see [section 5.2](#) of this guidance document). In the case of a booklet, page numbers can be considered. The languages should be ordered in a logical way, e.g. alphabetically.

- **Easy access to the information**

The information on the fold-out label should be easily accessible by allowing easy opening and reclosing of the label by the user. This can be ensured for example by using a "Pull tab", i.e. a small area of the label that allows lifting it easily from its backing sheet. Easy access to the information (and readability) can also be improved by featuring one language per inner page of the fold-out label.

5.3.1.2 Outer packaging

When packaging is too small or in such a form or shape that the labelling requirements of CLP Article 31 cannot be met, one of the options provided by CLP Article 29(1) is to provide limited labelling information on the inner packaging (i.e., according to section 1.5.1.2 of Annex I to CLP, at least: hazard pictograms, product identifier and name and telephone number of the supplier of the substance or mixture) while the full labelling information (including the UFI) is provided on outer packaging. This may be useful in the case of many small units within one outer packaging. In such cases, the requirements that normally apply to labels (see CLP Articles 31 and 32) will also apply to the label area on the outer packaging. When the outer packaging option is used, a distributor or retailer has to take care that all the label elements required by the CLP Regulation are

available when he places the single package units individually on the market.

5.3.2 Omission of certain label elements

In situations where it is impossible to meet the labelling requirements of CLP Article 31 (because of the small size, shape or form) and the full label information⁴² cannot be provided in fold-out labels, on tie-on tags or on an outer packaging, the label information may be **reduced** subject to certain conditions specified in section 1.5.2 of Annex I to CLP. This can be the case for:

- packages where contents do not exceed 125 ml and the substance or mixture is classified in one of the hazard categories listed in Table 7 below – this also refers to situations when a substance or mixture is re-filled into small volume bottles (125 ml or less) that are marketed afterwards, or when small volume bottles (125 ml or less) are no longer sold in outer packaging, but individually (see also [section 5.3.2.1](#) of this guidance document);
- soluble packaging for single use where contents do not exceed 25 ml (see also [section 5.3.2.2](#) of this guidance document).

Label information may also be adapted for:

- inner packaging of substances and mixtures for scientific research and development or quality control analysis when the contents do not exceed 10 ml (see also [section 5.3.2.3](#) of this guidance document);
- unpackaged hazardous substances or mixtures supplied to the general public (see also [section 5.3.2.4](#) of this guidance document);
- environmental labelling (see also [section 5.3.2.5](#) of this guidance document).

5.3.2.1 Labelling of packages when the contents do not exceed 125 ml

The label elements mentioned in column 2 of Table 7 may be omitted from the label of packages that do not exceed 125 ml of capacity when the substance or mixture is classified for the hazard classes or categories listed in column 1.

However, when the substance or mixture is classified for further hazard classes not listed in column 1 of Table 7, the label elements related to these other hazard classes still need to be included. Please refer also to section 1.5.2.1 of Annex I to CLP.

It should be noted that the exemptions regarding the labelling of small packages of aerosols classified as flammable (Directive 75/324/EEC⁴³) apply to aerosol dispensers.

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

⁴² i.e. the information required by CLP Article 17.

⁴³ 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.

Classification of the substance or mixture	Allowed omissions according to section 1.5.2 of Annex I to CLP
<p>Oxidising gases cat. 1 (H270)</p> <p>Gases under pressure (H280, H281)</p> <p>Flammable liquids cat. 2 or 3 (H225, H226)</p> <p>Flammable solids cat. 1 or 2 (H228)</p> <p>Self-reactive substances or mixtures, types C, D, E or F (H242)</p> <p>Self-heating substances or mixtures, cat. 2 (H252)</p> <p>Substances and mixtures which, in contact with water, emit flammable gases, cat. 1, 2 or 3 (H260, H261)</p> <p>Oxidising liquids cat. 2 or 3 (H272)</p> <p>Oxidising solids cat. 2 or 3 (H272)</p> <p>Organic peroxides, types C, D, E or F (H242)</p> <p>Acute toxicity cat. 4 (H302, H312, H332) (if the substance or mixture is not supplied to the general public)</p> <p>Skin irritation cat. 2 (H315)</p> <p>Eye irritation cat. 2 (H319)</p> <p>STOT-SE cat. 2 or 3 (H371, H335, H336) (if the substance or mixture is not supplied to the general public)</p> <p>STOT-RE cat. 2 (H373) (if the substance or mixture is not supplied to the general public)</p> <p>Hazardous to the aquatic environment – short-term (acute) aquatic hazard, cat. Acute 1 (H400)</p> <p>Hazardous to the aquatic environment – long-term (chronic) aquatic hazard, cat. Chronic 1 or 2 (H410 or H411)</p>	<p>hazard and precautionary statements for the hazard classes listed in column 1</p> <p><u>comment:</u> the hazard pictogram and signal word are required for the denoted hazard categories</p>
<p>Flammable gases cat.2 (H221)</p> <p>Reproductive toxicity: effects on or via lactation (H362)</p> <p>Hazardous to the aquatic environment – long-term (chronic) aquatic hazard, cat. Chronic 3 or 4 (H412 or H413)</p>	<p>precautionary statements linked to the hazard classes listed in column 1</p> <p><u>comment:</u> the hazard statements and signal word must be provided as no hazard pictogram is required for the denoted hazard categories</p>
<p>Corrosive to metals (H290)</p>	<p>hazard pictogram, signal word, hazard and precautionary statements for this hazard class</p>

5.3.2.2 Labelling of soluble packaging for single use which does not exceed a volume of 25 ml

The soluble packaging exemption applies to soluble packaging when the content does not exceed a volume of 25 ml. For such packaging, the CLP label elements required by CLP Article 17 may be omitted provided the packaging is intended for single use and it is contained within an outer packaging that bears all the label elements required by CLP Article 17.

The exemption applies in cases where the substance or mixture contained is classified exclusively for one or more of the hazards categories in sections 1.5.2.1.1 (b), 1.5.2.1.2 (b) or 1.5.2.1.3 (b) of Annex I to CLP (see Table 7 above). However, this exemption does not apply to substances and mixtures within the scope of Regulation (EC) 1107/2009 (for plant protection products) or Regulation (EU) No 528/2012 (for biocidal products).

5.3.2.3 Labelling of inner packaging when the contents do not exceed 10 ml

The CLP label elements required by CLP Article 17 may be omitted from the inner packaging provided that all the following conditions are met:

- the contents of inner packaging do not exceed a volume of 10 ml;
- the substance or mixture is placed on the market for supply to a distributor or downstream user for scientific research and development (SR&D)⁴⁴ or quality control analysis; and
- the inner packaging is contained within an outer packaging that contains all the label elements required by CLP Article 17.

However, it should be noted that the label on inner packaging must contain the product identifier and (if appropriate) the hazard pictograms; GHS01, GHS05, GHS06 and/or GHS08. In case more than two pictograms are assigned, GHS06 and GHS08 may take precedence over GHS01 and GHS05.

The exemption does not apply to substances and mixtures within the scope of Regulation (EC) 1107/2009 (for plant protection products) or Regulation (EU) No 528/2012 (for biocidal products).

5.3.2.4 Unpackaged hazardous substances or mixtures supplied to the general public

Labelling information about unpackaged chemicals sold to the general public must be made available to the customer, e.g. on an invoice or bill (see CLP Article 29(3)). When the purchase of such substances or mixtures occurs at a different point in time than their delivery to the customer, one might also consider providing a leaflet that contains the relevant labelling information when delivering the substance or mixture, or sending the information electronically before or upon delivery. CLP Article 29(3) provisions apply to substances listed in Part 5 of Annex II to CLP).

5.3.2.5 Environmental labelling

CLP includes the possibility to introduce exemptions from certain provisions on environmental labelling for certain mixtures classified as hazardous to the environment when it can be demonstrated that there would be a reduction in the environmental impact (see CLP Article 29(4)). However, no such exemptions or specific provisions have been agreed to date. Once determined in accordance with the procedure referred to in

⁴⁴ For more information on substances manufactured, imported or used in scientific Research and Development (SR&D) please consult ECHA [Guidance on Scientific Research and Development \(SR&D\) and Product and Process Orientated Research and Development \(PPORD\)](#).

CLP Articles 53 and 54, such exemptions or specific provisions would be defined in Part 2 of Annex II to CLP.

5.4 Interaction between the CLP and the transport labelling rules

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

Article 33 of the CLP Regulation sets out specific rules for situations where the packaging of hazardous substances and mixtures is also required to meet the labelling provisions in accordance with the rules on the transport of dangerous goods. The transport labelling provisions are set out in the UN Recommendations on the Transport of Dangerous Goods – Model Regulations. Transport labelling as referred to in CLP Article 33 includes all labels and marks required by e.g. Directive 2008/68/EC⁴⁵, for example the mark for environmentally hazardous substances, elevated temperature marks and limited/exempted quantities marks. A basic principle of the CLP Regulation is not to override any labelling required by the transport rules while maintaining essential hazard information on the relevant layer(s) of packaging.

CLP labelling is normally required on every layer of a packaging intended for supply and use.

Transport labelling will have to appear on the outer packaging of hazardous substances and mixtures if these are “dangerous goods” according to the rules on the transport of dangerous goods. In such cases, a CLP label may also appear on an outer packaging.

Single packages need to carry both the CLP label and transport labelling. If a CLP hazard pictogram on single or outer packaging relates to the same hazard as in the rules for the transport of dangerous goods, the CLP pictogram may be omitted to avoid unnecessary double labelling.

When a package consists of an outer and an inner packaging, together with any intermediate packaging, and the outer packaging meets the labelling provisions in accordance with the rules on the transport of dangerous goods, the hazard pictograms required by the CLP Regulation do not need to appear on the outer packaging. As mentioned above, the limited/excepted quantity marks are considered as transport labelling. Therefore, a CLP label is not required when those marks are carried on the outer packaging. CLP labelling may however be used if desired, according to CLP Article 33(1).

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 (CLP Article 33(2)).

The legal requirements of CLP Article 33 and the decisions involved when dealing with them are depicted in Figure 3.

⁴⁵ Directive 2008/68/EC for the inland transport of dangerous goods (road and rail).

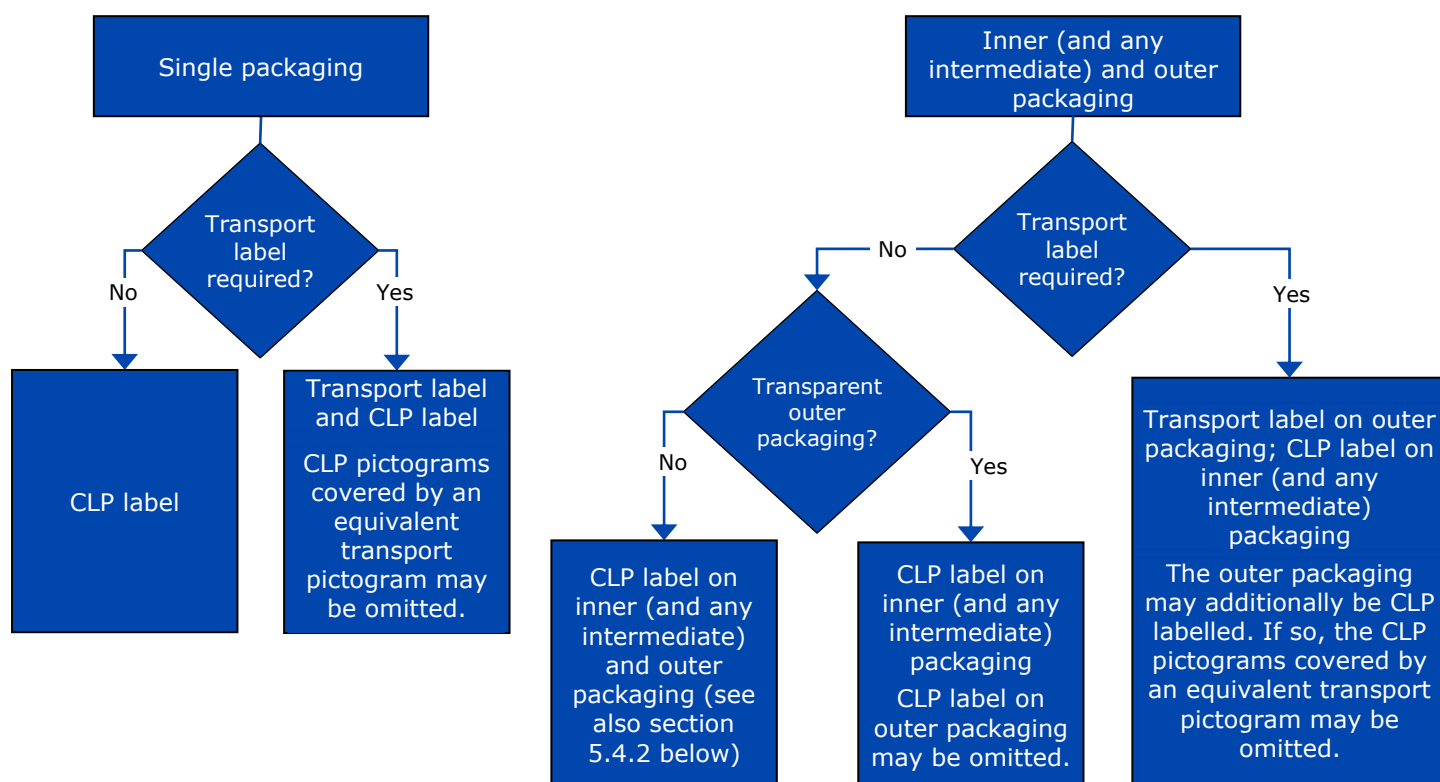


Figure 3: Decision flowchart for the application of CLP and transport labelling for single packaging (left) and combination packaging (right)

5.4.2 Packaging used for consolidation of supply packaging during transport

The CLP Regulation sets general packaging standards for suppliers to ensure the safe supply of hazardous substances and mixtures.

'Packaging' is defined in the CLP Regulation as "one or more receptacles and any other components or materials necessary for the receptacles to perform their containment and other safety functions". This means that the packaging of a substance or mixture can comprise multiple layers, for instance a bottle and a box.

CLP rules apply to all layers of packaging used for supply purposes. Any further packaging may then fall under the definition given in the transport legislation: "the outer protection of a composite or combination packaging together with any absorbent material, cushioning and any other components necessary to contain and protect inner receptacles or inner packaging". The function of outer packaging fulfilling this definition will remain the same whether or not a transport label is affixed to it.

CLP Article 33(2) should be interpreted as meaning that labelling according to CLP is required for the outermost layer of packaging that remains when the transport packaging is removed (and, as the case may be, to the inner and intermediate packaging). This type of 'outer' packaging (illustration (b) in Figure 4) requires a CLP label (see also [section 5.3.1.2](#) and [section 5.4.1](#) of this guidance document).

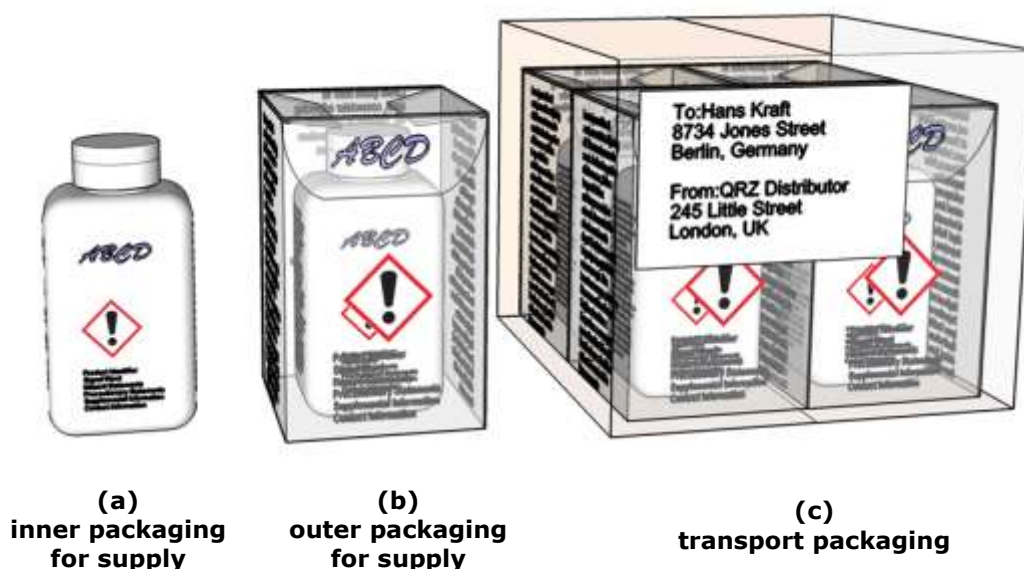


Figure 4: Application of CLP labelling on packaging used for supply and transport

Normally, suppliers, including distributors, use one and typically more additional layers of packaging to make the transport of multiple chemicals more convenient and to ensure that the correct products are delivered to each location in good condition. Such **transport packaging** (illustration (c) on Figure 4), used for the purpose of:

- protection of supply packages during transport and handling, and/or
- consolidation (combining several supply packages into a larger load for transport),

is thus **outside the scope of the CLP** Regulation and **does not** require a CLP label.

Where substances or mixtures are stored on site without being removed from their transport packaging **as they are awaiting further transport**, other labelling obligations outside the scope of CLP and the transport legislation may continue to apply, for example, a workplace risk assessment under the scope of the worker protection Framework Directive (89/391/EEC) and associated individual directives including the Chemical Agents Directive (98/24/EC⁴⁶), Carcinogens and Mutagens Directive (2004/37/EC⁴⁷) and, as appropriate, the safety and/or health signs according to Directive 92/58/EC⁴⁸. However, once the substances or mixtures **are no longer in transport** they must be removed from the transport packaging to enable the CLP label to be clearly seen, or a CLP label must be added to what was previously the transport packaging.

⁴⁶ Council Directive 98/24/EC of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work (OJ L 131, 5.5.1998, p. 11–23), amended by Directive 2007/308/EC and Directive 2014/27/EU.

⁴⁷ Directive 2004/37/EC of the European Parliament and the Council of 29 April 2004 on the protection of workers from the risks related to exposure to carcinogens or mutagens at work (OJ L 158, 30.4.2004, p. 50) amended by Directive 2007/308/EC and Directive 2014/27/EU.

⁴⁸ Council Directive 92/58/EEC of 24 June 1992 on the minimum requirements for the provision of safety and/or health signs at work (OJ L 245, 26.8.1992, p.23), amended by Directive 2007/308/EC and Directive 2014/27/EU.

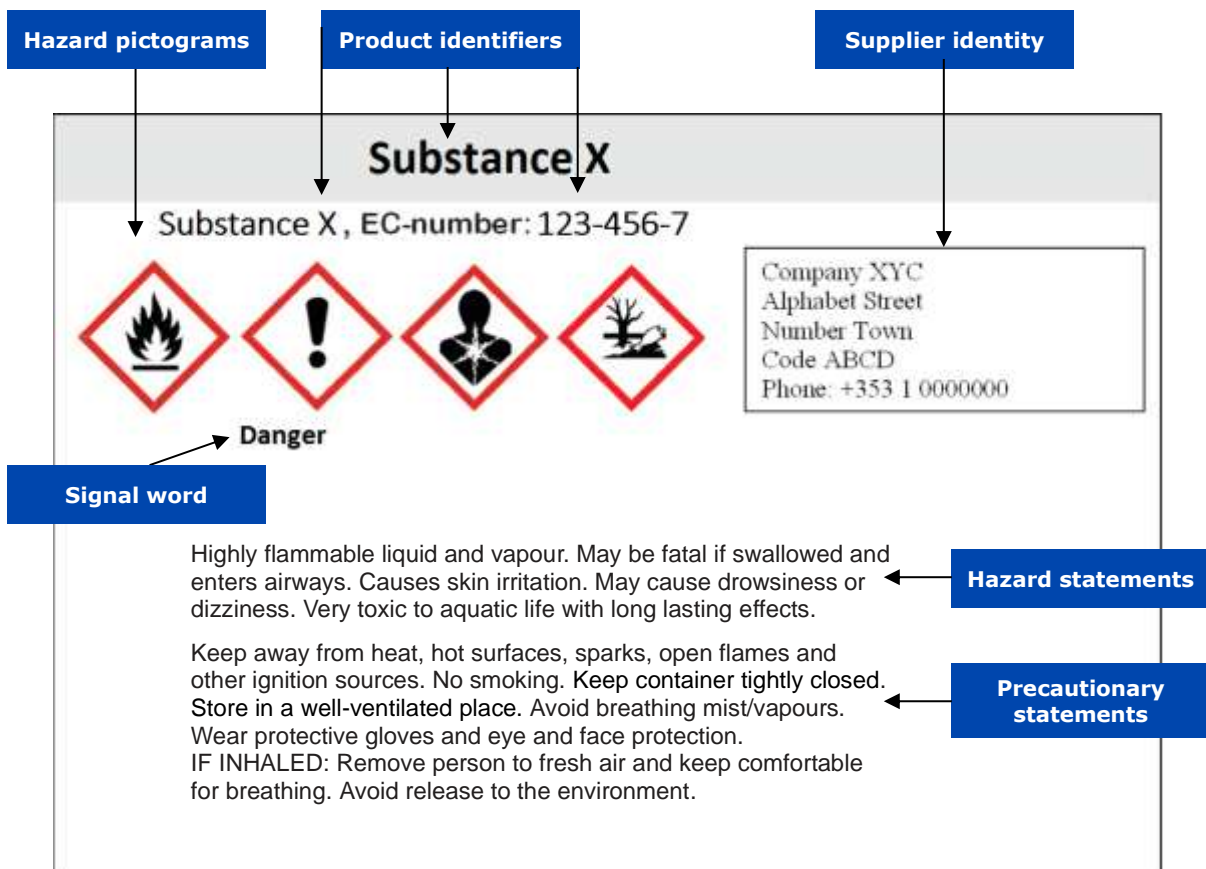
6. Example labels

In this section, 13 examples are provided to illustrate different situations that may be encountered when designing labels.

Please note that each of the labels below serves only as an example of how to arrange the elements on the label in a given situation. The examples given are **not exhaustive** or mandatory in all aspects and do not reflect specific uses. The dimensions of labels and label elements shown below are not necessarily the actual dimensions.

Example 1: Single language label for a substance (not for the general public)

This example represents a simple label for a substance for supply and use 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.



Considering the industrial/professional use, the combined statement P301 + P310 has been omitted from the label. To further reduce the number of P-statements and the amount of digestible information on the label, the statement P391 has also been omitted from the label, as the prevention statements for the physical and health hazards appear to contain the more urgent advice for the label. The final selection of the P-statements resulted in six P-statements compared to the starting set of eight P-statements.

The selected P-statements would have to be included in the SDS, under heading 2.2 ("Label elements"). The de-selected statements can be introduced under the relevant headings of the SDS to provide the industrial or professional user with sufficient information to handle the substance safely.

Example 2: Multi-language label for a substance containing non-obligatory supplemental information (not for the general public)

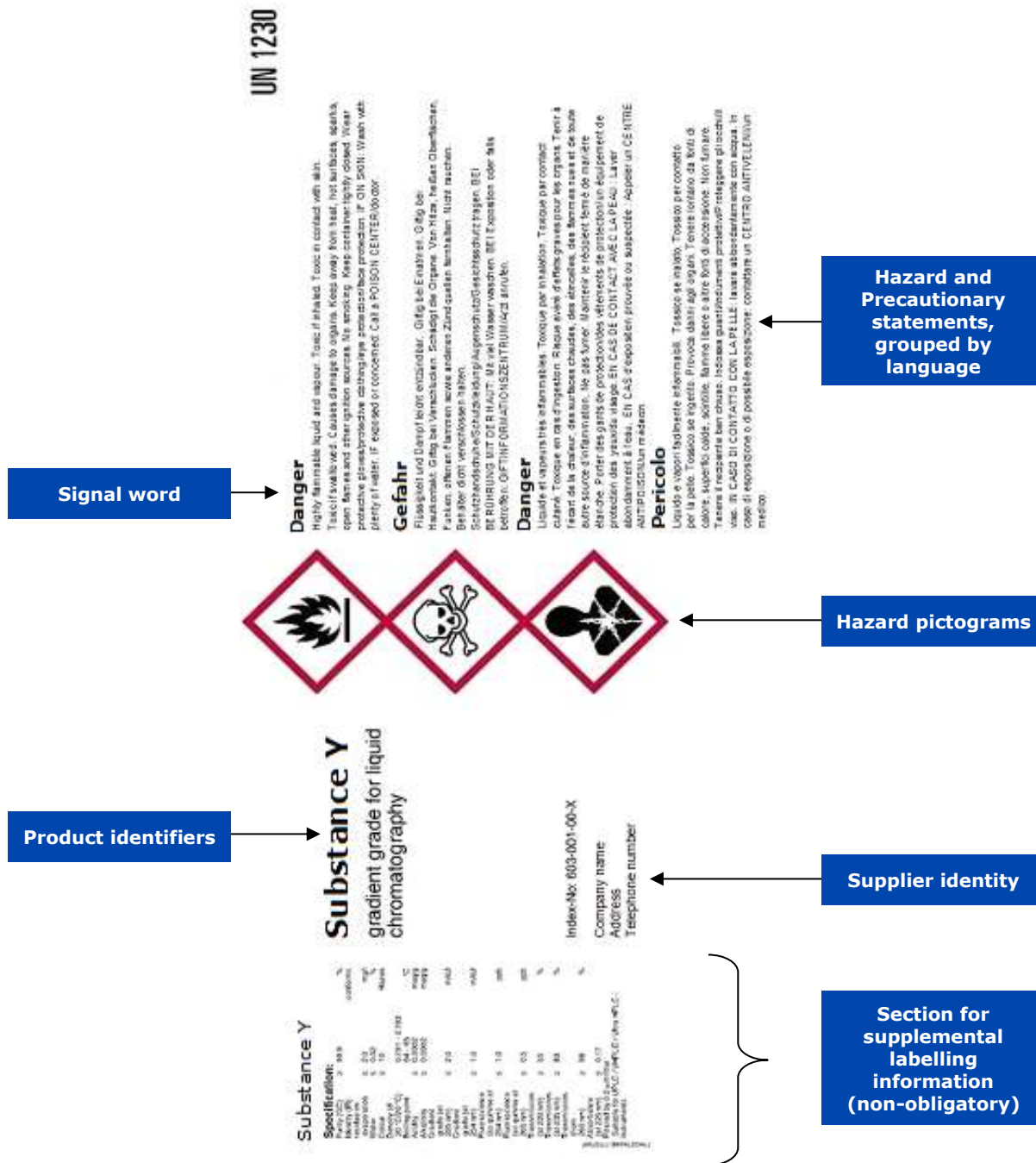
The example label given below represents a multi-language label for supply and use. It shows the CLP terminology and pictograms in accordance with CLP Article 17(a) and (c) to (h), i.e. the product identifier, the identity of the supplier, the hazard pictograms, the signal words and the hazard and precautionary statements in four languages.

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.

In accordance with CLP Article 32(3), the hazard and precautionary statements of one language are located together on the label. A section for supplemental labelling is included on the left-hand side of the label including non-obligatory supplemental labelling information.

As to the lay-out, the label is an authentic label designed for a 2.5 litre bottle. Given that the real dimensions are slightly larger than depicted here, there is still potential to optimise the structuring of the information, e.g. by using a more prominent place for the signal word or larger letters for H- and P-statements. 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 5.2](#) of this guidance document).

If the content of the part for supplemental labelling is increased (for example to incorporate information related to the use of the substance), the overall area of the label and the size of its elements may have to be increased as well, in particular the letter size for the signal words, hazard and precautionary statements. Such an increase would improve the legibility of the obligatory label information, which appears in multiple languages. In this case, it may be wise also to increase the size of the pictograms.



Example 3: Single language label for a mixture containing both obligatory and non-obligatory supplemental information (supplied to the general public)

The example label given below illustrates the supply and use label for a typical consumer product (detergent).

All obligatory labelling information is shown, i.e. the product identifiers (trade name and designation of the mixture; one of them would have been sufficient), the identity of the supplier, the signal word, the hazard and precautionary statements and the obligatory supplemental information, in accordance with Regulation (EC) No 648/2004 on detergents, and including the UFI code. Please note that supplemental labelling information according to CLP is grouped together whilst the other supplemental information (in this case the bar code) is located in another place. The UFI can alternatively be placed outside the label (e.g. printed or affixed on the inner packaging) but right next to the other obligatory CLP label elements.

No P-statement on disposal is given as this is not required for a mixture classified as eye irritant.

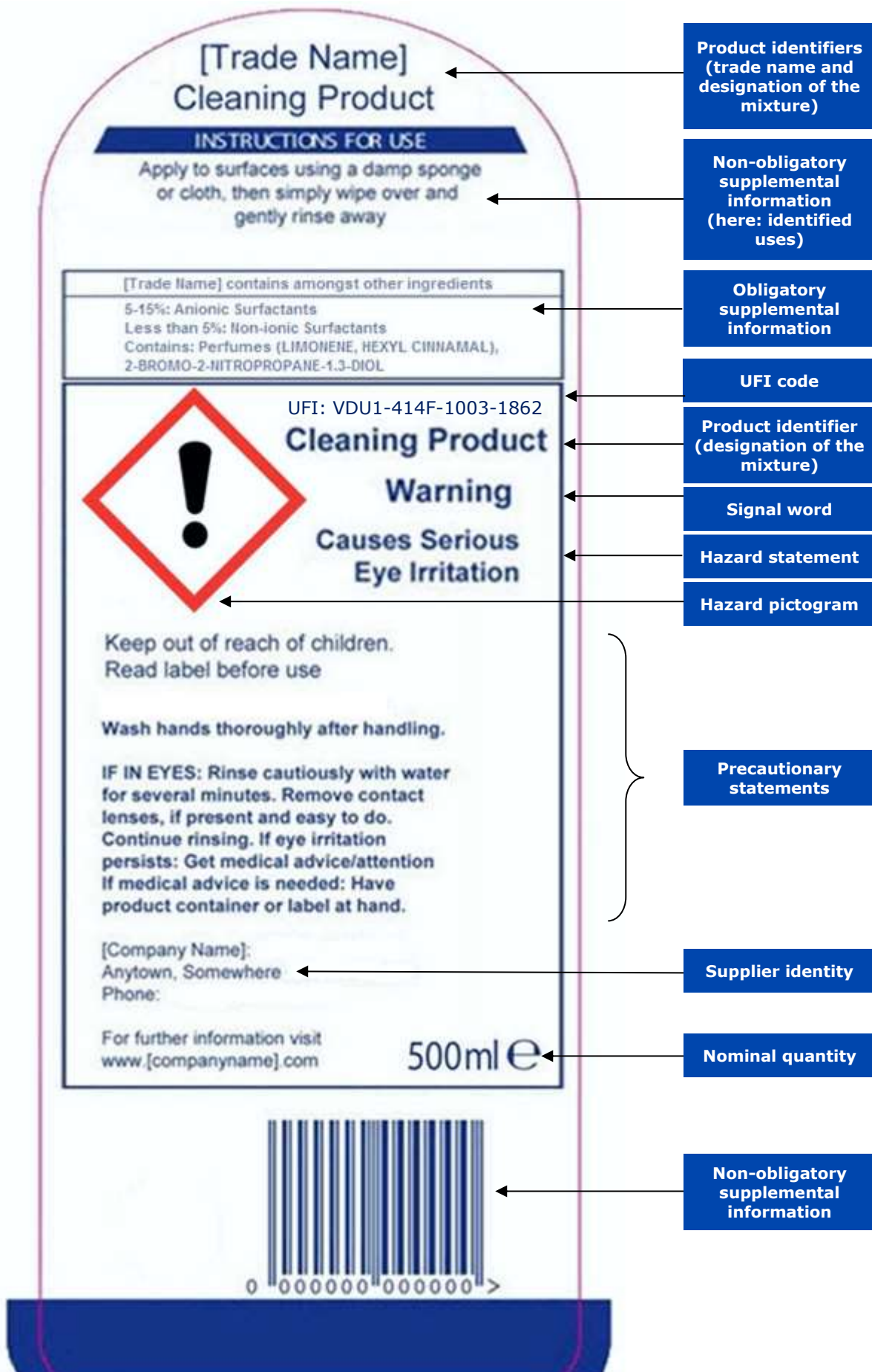
As the product is supplied to the general public, its nominal quantity is also provided on the label. Beyond the obligatory supplemental information, also some non-obligatory supplemental information is shown.

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

The label 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 no change overall.

The label is larger than the minimum dimensions required by the CLP Regulation, which is at least 52 mm x 74 mm for a 500 ml bottle. The pictogram complies with the reference minimum area of 16 x 16 mm.

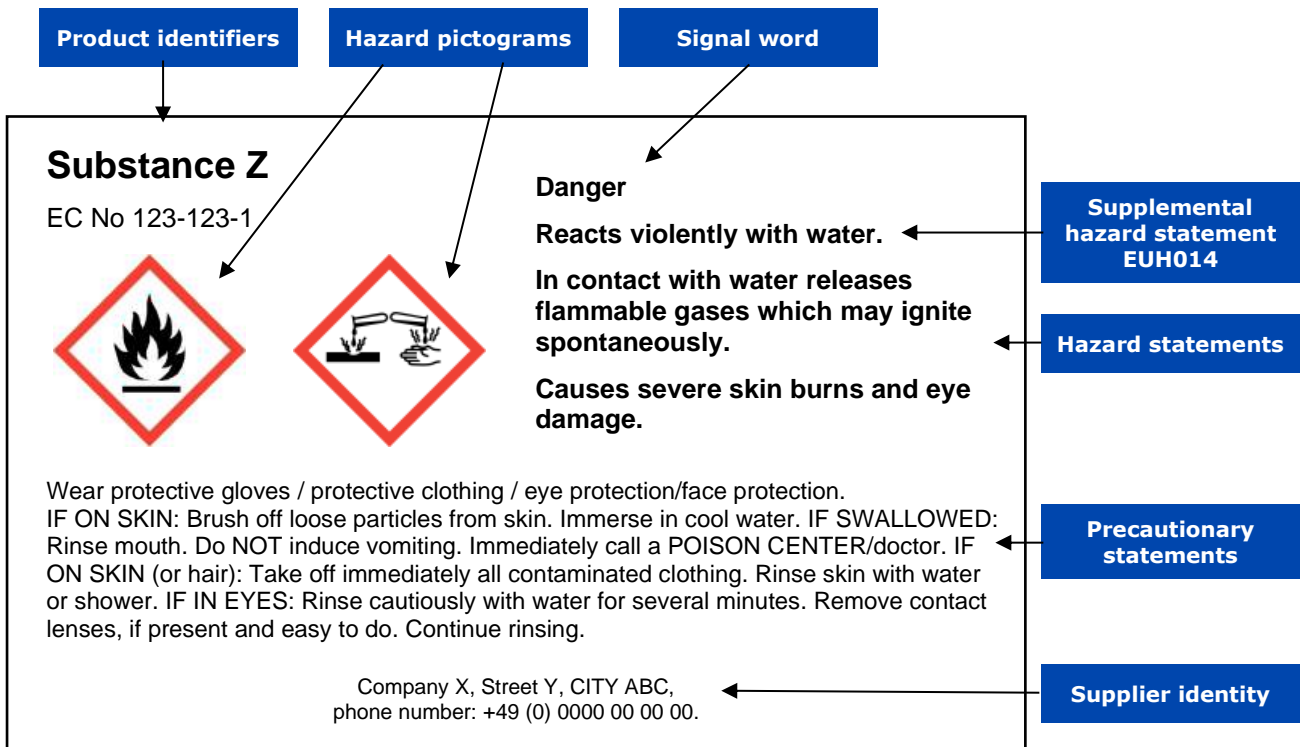
The label shown is primarily drafted for inner packaging. If the chemical is contained in combination (= inner + outer) packaging, the same information has to be shown on the outer packaging, unless the information on the inner packaging can be seen through the outer packaging.



Example 4: Single language label for a substance containing supplemental hazard statements (not for the general public)

The example below illustrates a label for a substance for supply and use. A harmonised classification (Water-react. cat. 1, Skin corr. cat. 1B) as well as the supplemental hazard statement EUH014 are assigned through Annex VI to CLP. No other available, reliable information was found that identified any further hazards. The substance is not intended to be used by the general public; it is supplied in a 1 litre 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 the supplemental hazard statement EUH014, in accordance with Table 3 of Annex VI to CLP. Although EUH014 is supposed to be supplemental information only, it is intentionally placed close to the regular CLP hazard statements to reinforce the message provided by the latter.



Example 5: Multi-language label for a mixture containing both obligatory and non-obligatory supplemental information (supplied to the general public)

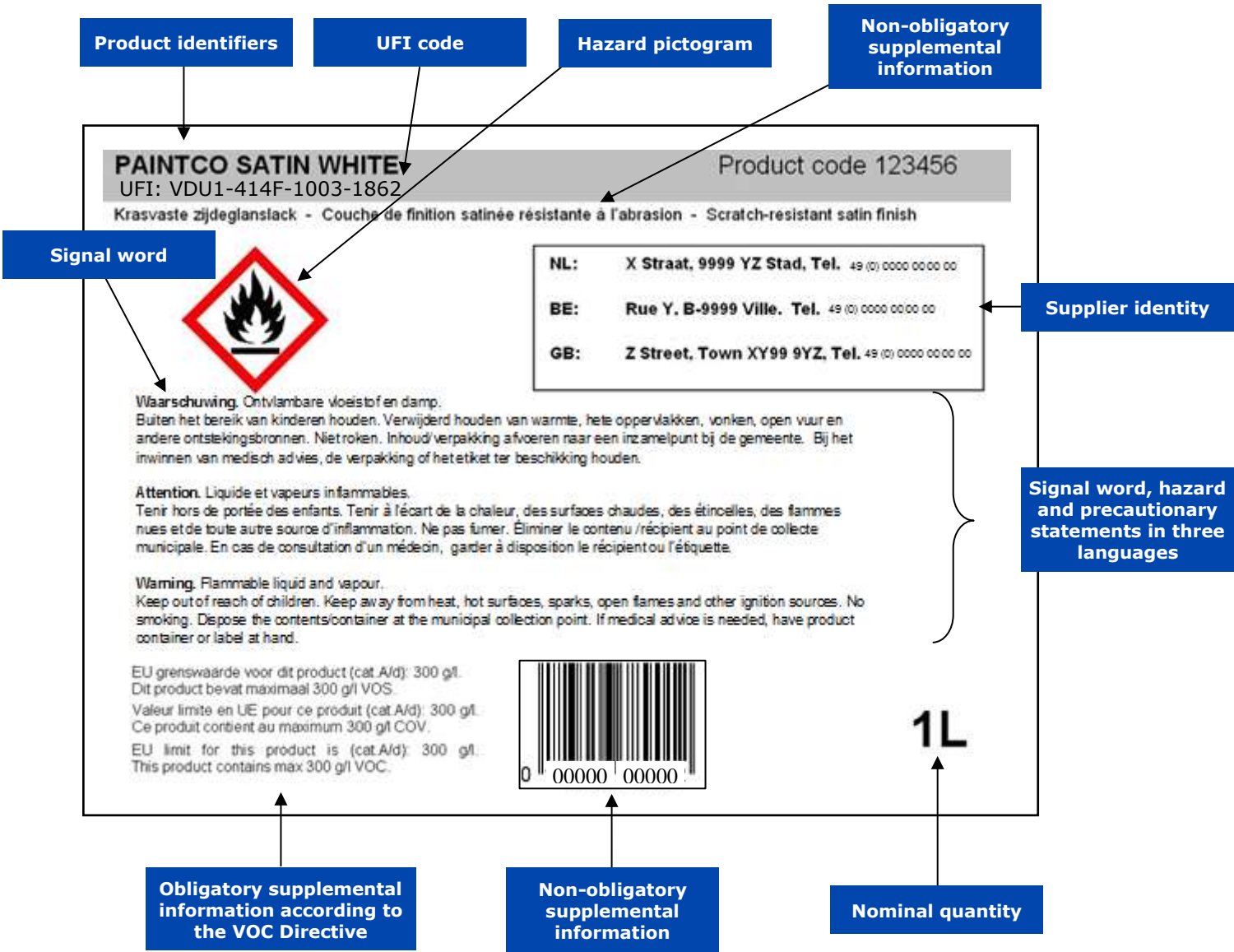
Example 5 represents a draft multi-language label for a typical consumer chemical (decorative paint) for supply and use.

All obligatory labelling information is 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 particular information in accordance with Directive 2004/42/EC on the limitation of emissions of volatile organic compounds (VOCs) due to the use of organic solvents in certain paints and varnishes and vehicle refinishing products, and including the UFI code (in this example, the same UFI code has been used in the submission in each Member State). The UFI can alternatively be placed outside of the label (e.g. printed or affixed on the inner packaging) but right next to the other obligatory CLP label elements. As regards to the multi-language label in several MSs, it should be clearly stated on the label to which country the specific UFI applies, unless the same apply(ies) to all countries where the mixture is placed on the market. In cases where a different UFI is used in each Member State (not recommended), it has to be clear which UFI is relevant for each Member State (e.g. the relevant UFI with a country code should be placed with the label elements of the applicable language(s) of that Member State).

In 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 public, its nominal quantity is also provided on the label. Beyond the obligatory label elements, non-obligatory supplemental information is shown.

This example label separates the CLP label elements from the supplemental information. The CLP label elements are located in a more eye-catching position on the label while the supplemental information can be found rather in the margins of the label. The texts reflecting the supplemental information appear in slightly smaller letters than the CLP label elements.

The size of this label is intended to be 125 mm x 150 mm when applied on the packaging. This means that the real label will be considerably larger than the minimum label size for a 1 litre package (52 x 74 mm) required under the CLP Regulation. The pictogram size of 19 x 19 mm is less than 1/15th of the area of the whole label, but greater than 1/15th of the area dedicated to the information required by CLP Article 17.



Example 6: Fold-out label for a mixture (supplied to the general public)

The example below represents a multilingual, fold-out label for a mixture for supply and use, intended for the general public.

The label for this mixture is required to bear a large number of obligatory CLP label elements, namely three hazard pictograms, three hazard statements and numerous precautionary statements subject to the principles of precedence. It was impossible to put all these label elements on the immediate container due to its shape and size (plastic container of 100 ml capacity). The supplier cannot accommodate on a standard label the required information in the official language of the Member State where the product is placed on the market (Poland). Because of this, the supplier has chosen to use a fold-out label. This way, the supplier can also include the two additional languages they consider necessary in this case. The label elements are included on the label in the following way:

Front page

- trade name or designation,
- hazard pictograms,
- signal words in all languages of the label,
- nominal quantity, as the mixture is made available to the general public,
- contact details of supplier,
- reference to the full safety information inside (in this case the front page contains the symbol of an arrow to illustrate that the full safety information is available on inside pages),
- country codes indicating which languages are covered by the label,
- UFI code (in this case, the same UFI code has been included in the submission in each Member State). The UFI can alternatively be placed outside of the label (e.g. printed or affixed on the inner packaging) but right next to the other obligatory CLP label elements.

Inside pages

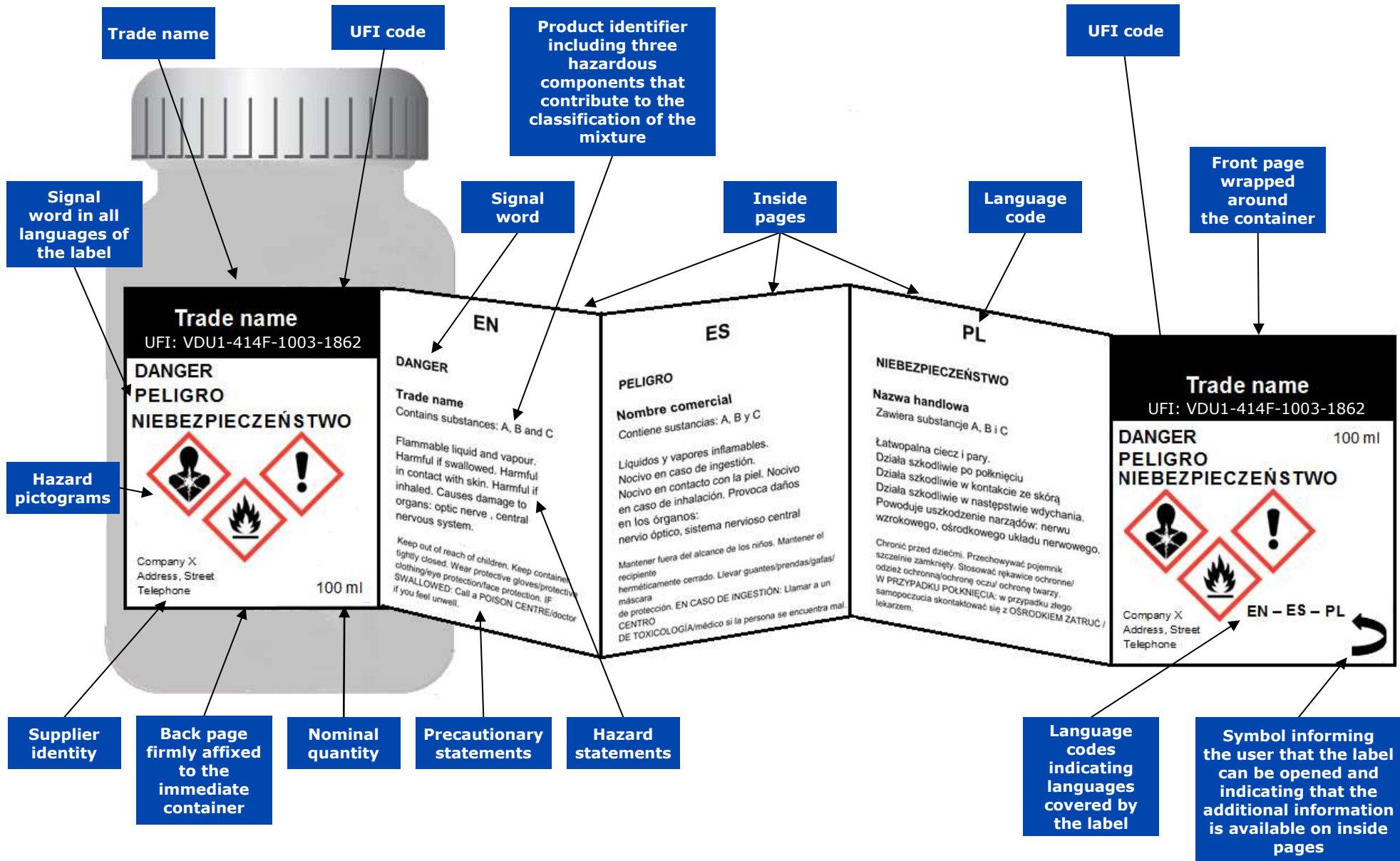
- full product identifier (including hazardous compounds A, B and C in this particular case),
- signal word,
- hazard statements,
- precautionary statements,

The full safety information on the inside pages is given in each language mentioned on the front page and also grouped by language. The country codes are featured on the top of each inner page to enable the user to quickly identify his language.

Back page (attached to the immediate container)

- trade name or designation,
- hazard pictograms,
- signal word,
- nominal quantity,

- contact details of supplier,
- UFI code (only one code has been included in the submission in each Member State).



6.1 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. Please note that the labelling exemptions only apply if the alternative labelling on fold-out labels, tie-on tags or outer packaging is technically not feasible.

Example 7: Substance in a 8 ml bottle (not for the general public)

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

Flam. Liq. 2	H225 Highly flammable liquid and vapour
Repr. 2	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))
Asp. Tox. 1	H304 May be fatal if swallowed and enters airways
STOT-RE 2	H373 May cause damage to organs (state all organs affected, if known) through prolonged or repeated exposure (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)
Skin Irrit. 2	H315 Causes skin irritation
STOT SE 3	H336 May cause drowsiness or dizziness
Aquatic Chronic 2	H411 Toxic to aquatic life with long lasting effects

Based on CLP Article 17, many labelling elements would be required. The bottle containing the substance is placed on the market individually. Since it is assumed for this example that the labelling information cannot be accommodated on a fold-out label, tie-on tag or on outer packaging, the supplier is allowed to apply the small packaging exemptions outlined in section 1.5.2 of Annex I to CLP.

Accordingly, the hazard and precautionary statements pertaining to the following hazard classes and categories:

Flam. Liq. 2, STOT-RE 2, Skin Irrit. 2, STOT-SE 3 and Aquatic Chronic 2

may be omitted from the label. However, and in line with the CLP Regulation, the hazard pictograms:

GHS02, GHS07, GHS08 and GHS09

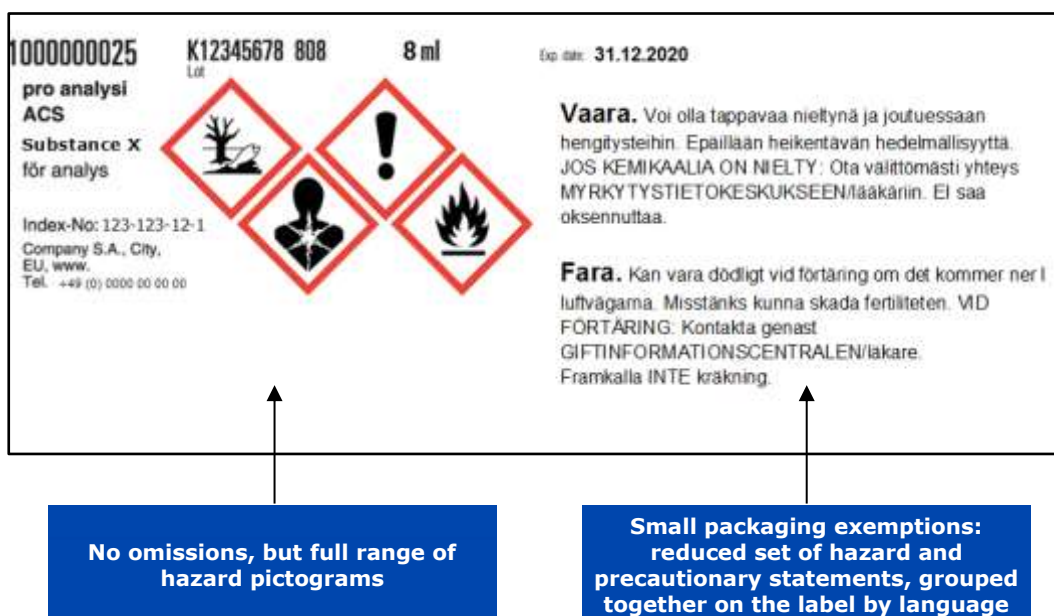
were retained for these hazards.

No small packaging exemptions apply to the following hazards classes and categories: Repr.2 and Asp. Tox. 1. This means that the pictograms and the hazard and precautionary statements pertaining to these hazard classes and categories have been retained.

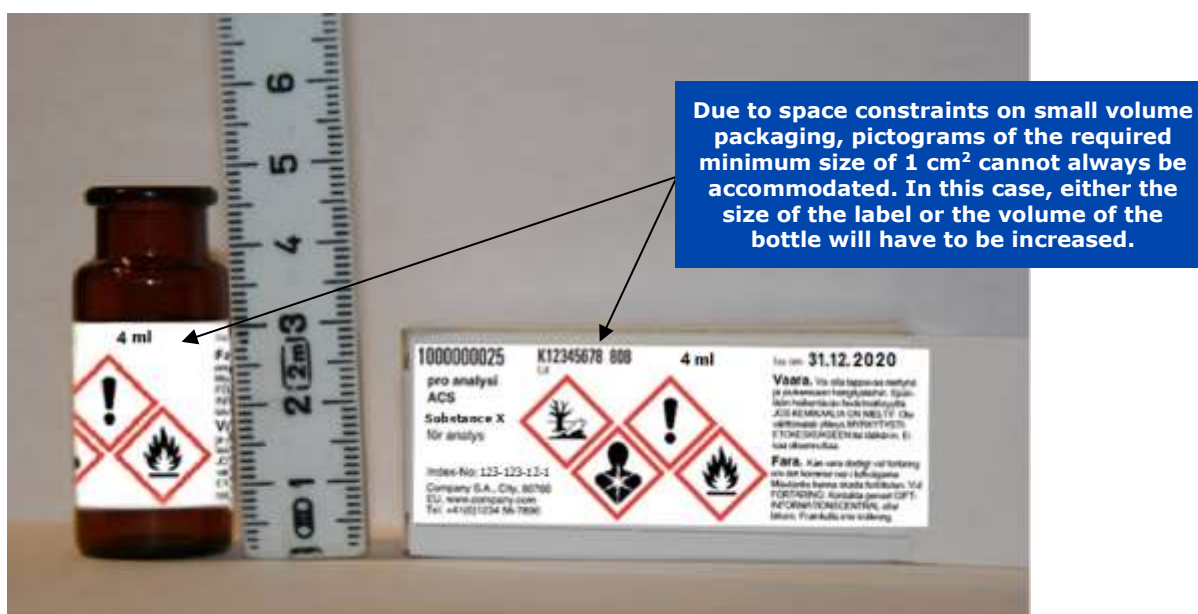
The precautionary statements have obviously been reduced, following CLP Articles 22 and 28. For example, the statement P501 ("Dispose of contents/container to...") was not included because the substance is not supplied to the general public and there are no specific disposal requirements above the normal expectation for the disposal of chemicals (see also [section 7](#) of this guidance document). Out of a set of originally 20 different precautionary statements, only one single (combination) statement, namely

P301+P310+P331 (“IF SWALLOWED: Immediately call a POISON CENTER/doctor. Do NOT induce vomiting.”) finally remains on 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” (Finnish: Vaara; Swedish: Fara) was selected, in line with the applicable precedence rule.



If the real dimensions of the label are 32 mm x 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 4 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.



Example 8: Hazardous solid substance in a 100 ml bottle (not intended for the general public)

This example represents a one-language label for small packaging for a solid substance Y, which is assigned the following classifications:

Ox. Sol. 2	H272 May intensify fire; oxidiser
Carc. 1B	H350 May cause cancer (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)
Muta 1B	H340 May cause genetic defects (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)
Repr. 1B	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)
Acute Tox. 2 (inhalation)	H330 Fatal if inhaled
Acute Tox. 3 (oral)	H301 Toxic if swallowed
STOT RE 1	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)
Acute Tox. 4 (dermal)	H312 Harmful in contact with skin
Skin Corr. 1B	H314 Causes severe skin burns and eye damage
Resp. sens. 1	H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled
Skin sens. 1	H317 May cause an allergic skin reaction
Aquatic Acute 1	H400 Very toxic to aquatic life
Aquatic Chronic 1	H410 Very toxic to aquatic life with long lasting effects

Pursuant to CLP Article 17, a lot of labelling information would be required. Similarly to the previous example, it is assumed that the supplier is allowed to use the small packaging exemptions outlined in section 1.5.2 of Annex I to CLP.

Substance Y is not presumed to be listed in Annex VI to CLP, nor in the Classification and Labelling Inventory. Therefore, only the product identifiers referred to in CLP Article 18(2)(c) need to be provided, i.e. the CAS number (if available, see CLP Article 18(2)(d)) and the IUPAC or another international name.

In accordance with the small packaging exemptions outlined in section 1.5.2 of Annex I to CLP, only the hazard and precautionary statements pertaining to the following hazard classes and categories:

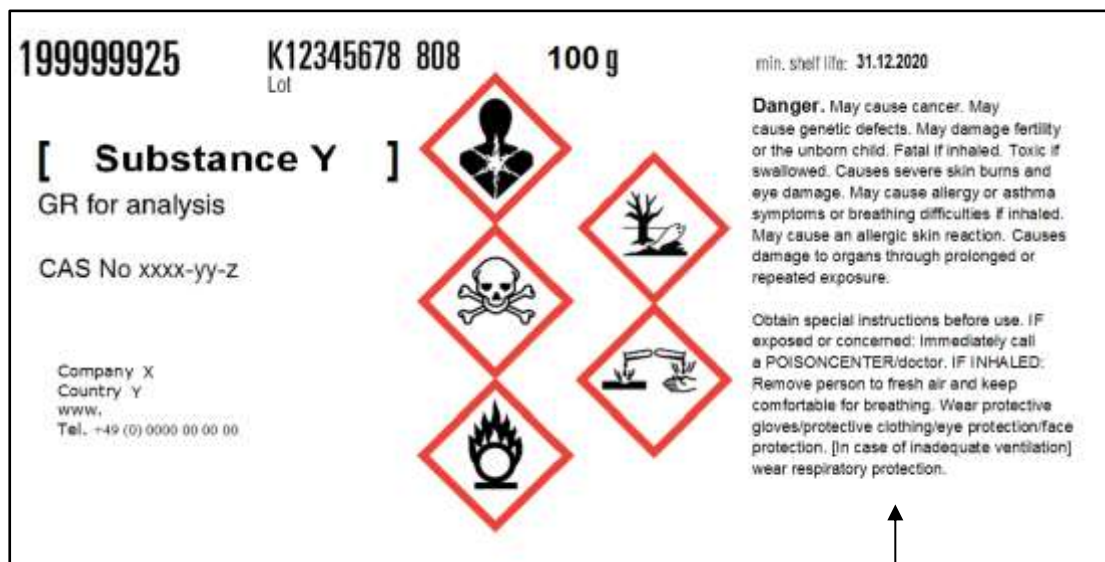
Ox. Sol. 2, Acute Tox. 4, Aquatic Acute 1, and Aquatic Chronic 1

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

The precautionary statements on the example label below start with "Obtain special instructions before use." A significant reduction has been performed for the precautionary statements, based on CLP Articles 22 and 28. 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.

Example 9: Supply and transport label for a single package (not intended for the general public)

This example illustrates the provisions of CLP Article 33(3) and represents a label for a hazardous mixture that is assigned the following classification:

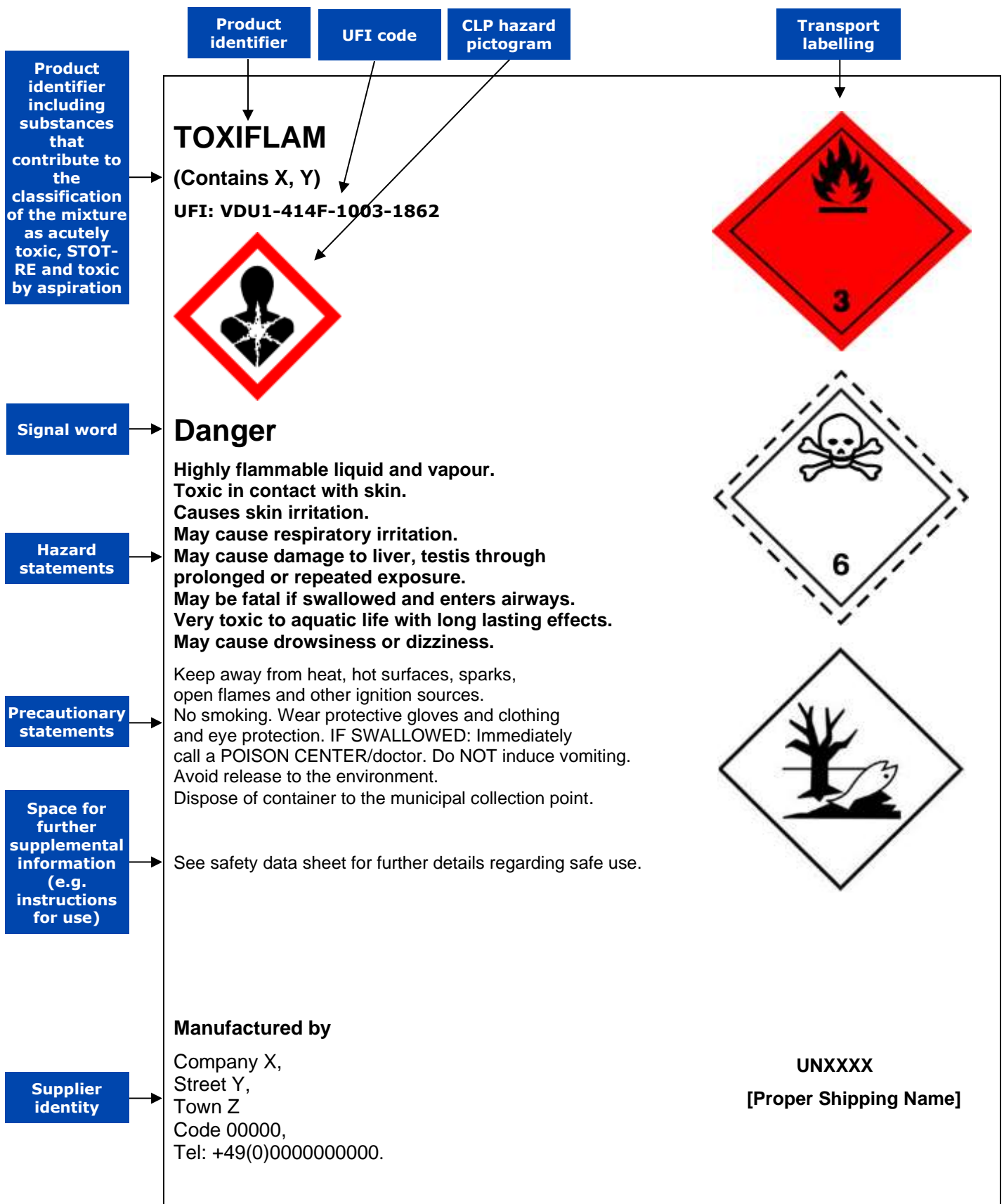
Flam. Liq. 2	H225 Highly flammable liquid and vapour
Acute Tox. (dermal) 3	H311 Toxic in contact with skin
Skin Irrit. 2	H315 Causes skin irritation
STOT SE 3	H335 May cause respiratory irritation
STOT SE 3	H336 May cause drowsiness or dizziness
STOT RE 2	H373 May cause damage to organs (state all organs affected, if known) through prolonged or repeated exposure (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)
Asp. Tox. 1	H304 May be fatal if swallowed and enters airways
Aquatic Acute 1	H400 Very toxic to aquatic life
Aquatic Chronic 1	H410 Very toxic to aquatic life with long lasting effects

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

In this case, the supplier has chosen to include the transport label elements and marks together with the CLP labelling elements on a joint label. This common label and the font size used would be large enough to conform to the specifications set out in the European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR) that has been implemented within the EU through Directive 2008/68/EC.

In relation to the CLP hazard pictograms GHS06 and GHS07, only GHS06 needs to be displayed, in accordance with the precedence rule set out in CLP Article 26(1)(b). However, the supplier has omitted the CLP hazard pictograms GHS06, GHS09 and GHS02, as the underlying hazard classes and categories are already covered by the corresponding transport pictograms.

In this example, the UFI is indicated on the label. However, for hazardous mixtures that are subject to the submission of information under CLP Article 45, when they are supplied for use at industrial sites the UFI can alternatively be indicated in the SDS only.

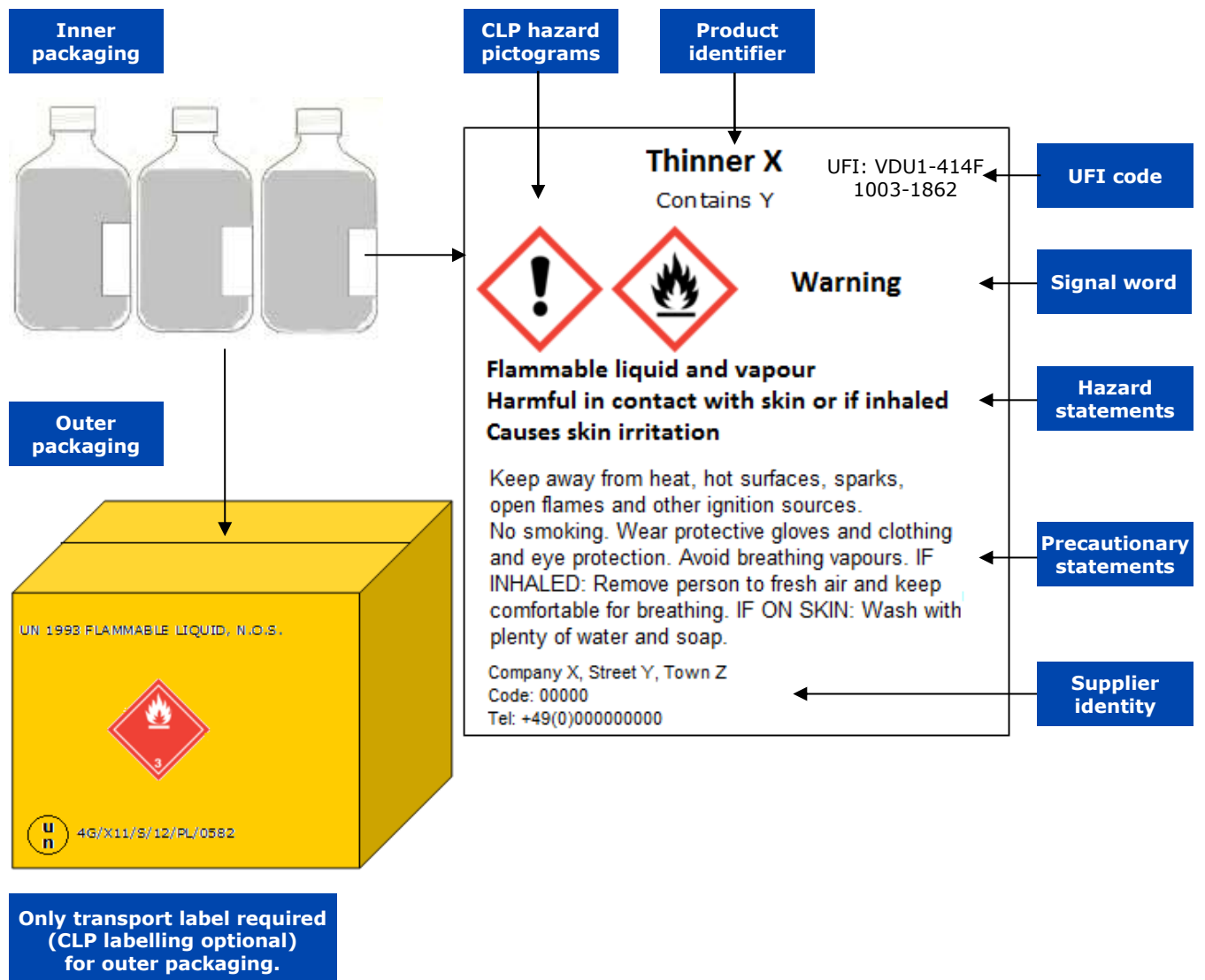


Example 10: Labelling for a mixture that is transported on land in outer and inner packaging (not intended for the general public)

This example illustrates the labelling of a transported mixture classified as:

Flam. Liq 3	H226 Flammable liquid and vapour
Acute Tox. 4	H312 Harmful in contact with skin
Acute Tox. 4	H332 Harmful if inhaled
Skin Irrit. 2	H315 Causes skin irritation

The mixture is contained in an inner packaging (bottles) that is in turn contained in an outer packaging (box), which is not transparent. The mixture is for professional users and not intended to be used by the general public. The UFI can alternatively be placed outside of the label (e.g. printed or affixed on the inner packaging) but close to the other obligatory CLP label elements.



Example 11: Labelling for a mixture that is transported on land in single packaging (not intended for the general public)

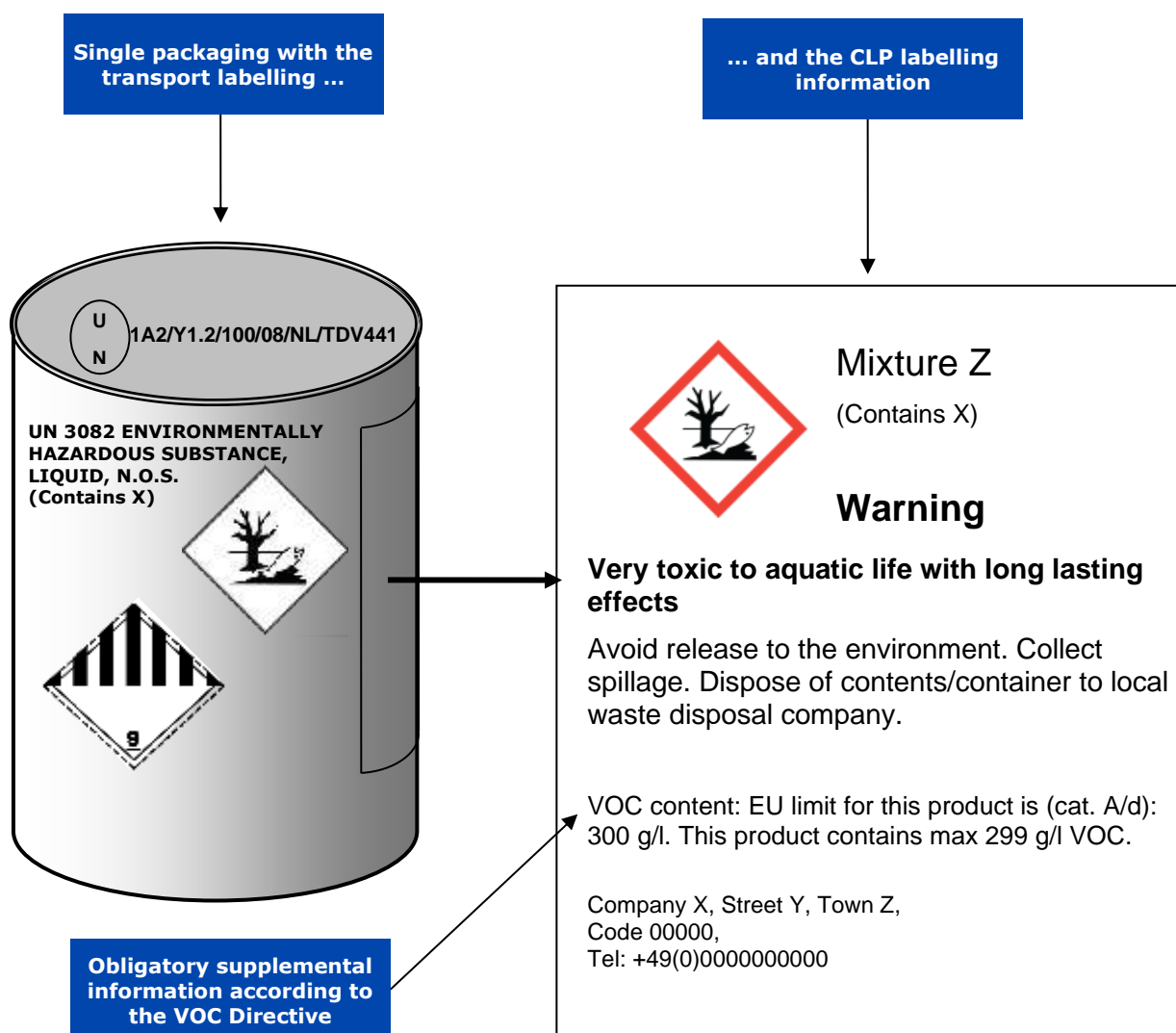
This example illustrates the provisions related to the labelling of single packaging in accordance with CLP Article 33(3). It is an example of a mixture that is classified and labelled in accordance with the rules on the transport of dangerous goods and under the CLP Regulation. The mixture is transported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

In this example, the full CLP labelling information is provided by means of a separate label, in addition to the transport labelling information (version 1).

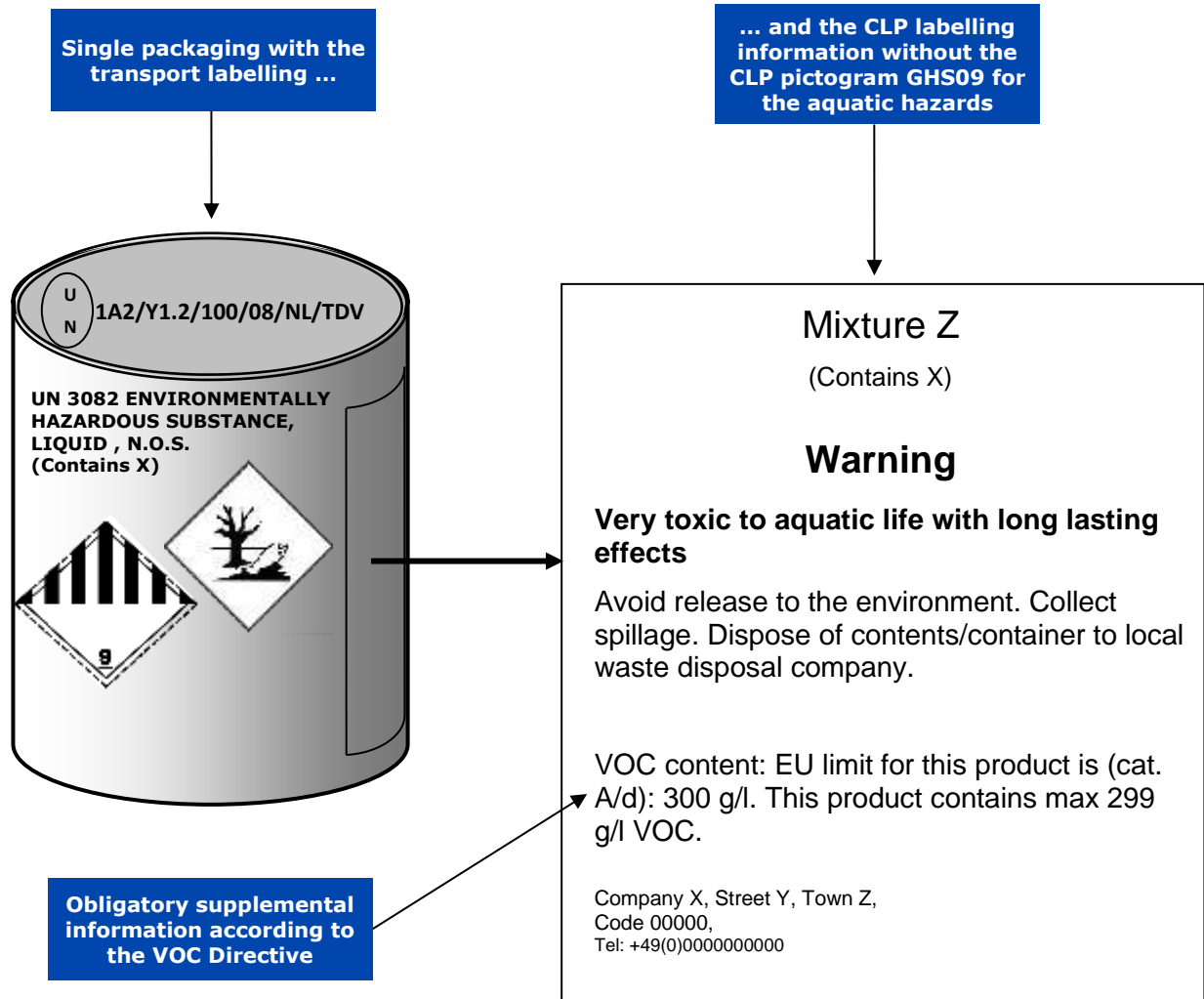
The CLP hazard pictogram GHS09 may be omitted from the packaging because it relates to the same hazards as the “dead tree – dead fish” transport mark (version 2).

Since the mixture is hazardous to the environment only, a UFI is not required.

Version 1:



Version 2:



6.2 Specific case: labelling of two-component products

In certain specific cases the packaging of a product can be so unique that it is difficult to meet the CLP labelling requirements. Examples of such situations are given below. Please note that the examples only illustrate the general aspects of labelling of two-component products and are not intended to present the correct selection of appropriate label elements.

Please note:

A case-by-case judgement may be necessary when determining the labelling requirements for similar, unique packaging. The information should not confuse the user and the label should be easily understandable.

Example 12: Labelling of a two-component adhesive sold as a kit

The figure below shows an example of a popular two-component adhesive sold as a kit consisting of two mixtures, namely an epoxy resin (Part A) and a hardener (Part B). The two mixtures are placed in separate containers which are fixed together and sold as a kit in transparent outer packaging. When used, the content of both containers is mixed after or during extrusion. Part A and Part B react to produce a final mixture, which can be used as an adhesive for a wide range of materials.



In this type of situation, two separate labels need to be affixed to the containers (one label for each mixture (in a container)). The hazard information provided on the labels must relate to the form/physical states in which both mixtures (Part A and Part B) are placed on the market. On each label the UFI relevant for the specific mixture has to be included. The outer packaging of the whole kit need not be labelled, as it is transparent and permits the inner packaging (both containers) to be clearly seen.

If the product formed during end-use is hazardous (with different properties to the mixtures in the containers), sufficient instructions to enable safe use must be provided to the user. The instructions can for example be provided on the label or as a separate leaflet in the package.

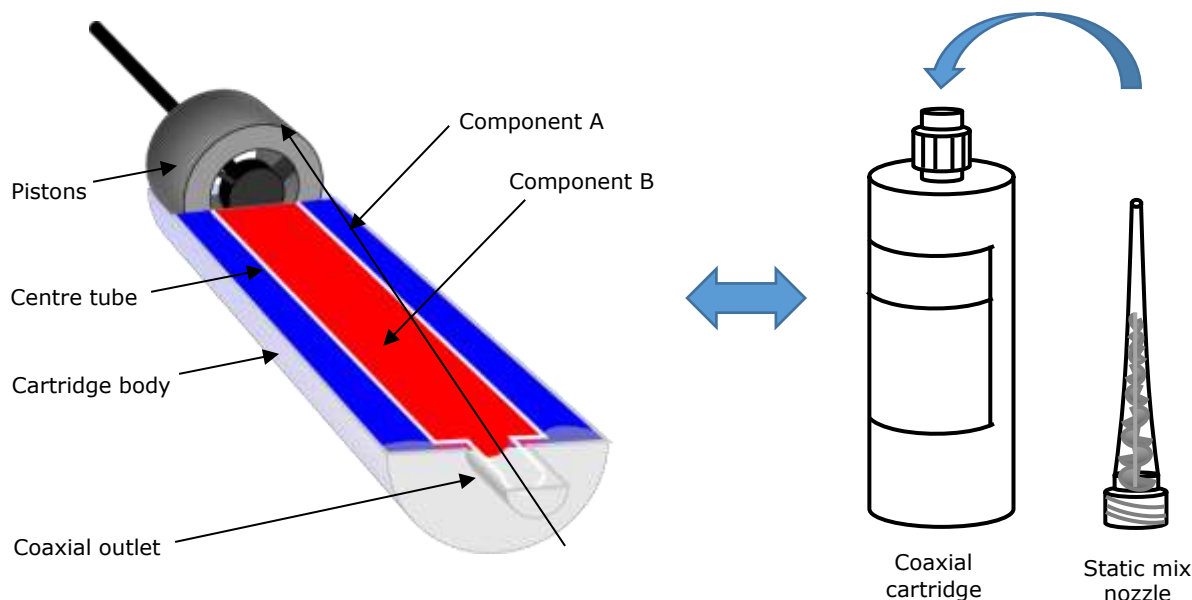
If such a product is not intended for the general public, two separate SDSs should be provided to enable the users to meet their responsibilities in relation to the management

of risks arising from the use of the reaction product that occur upon the end use of the two mixtures (i.e. the adhesive).

As the adhesive in the example is also classified as hazardous, the relevant information about the risk management measures should be provided in the SDSs.

Example 13: Labelling of a co-axial cartridge

A coaxial cartridge consists of a centre tube surrounded by an outer “doughnut” tube for consistent two-component dispensing with a specified ratio of components (see figures below). Normally, the two sections of the cartridge have their own moulded pistons. As both pistons are pushed, the two components are pushed together to mix and react through a static mix nozzle. A control valve located at the outlet prevents cross-contamination. A divider plate keeps the components separate until they reach the nozzle outlet.



In the case of a co-axial cartridge, there is an outer packaging – a single container visible to the user. To ensure the safe use of the two-component product in the cartridge, it should be labelled with one physical CLP label where the label elements for each component mixture are clearly separated to differentiate between them.

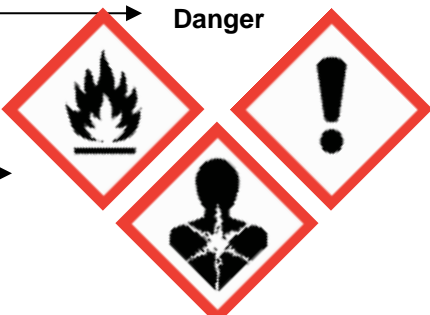
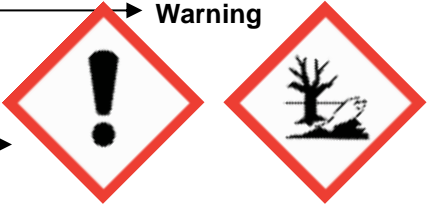
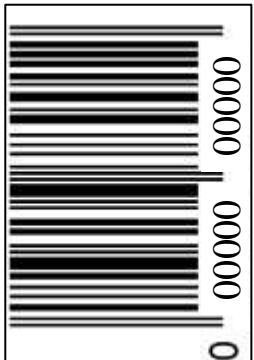
The following mandatory elements of the CLP label should be shown (where applicable) separately for each of the component mixtures:

- product identifier of the component mixture,
- hazard pictograms,
- signal word,
- hazard statements,
- precautionary statements,
- supplemental information specific to each mixture, including the UFI code.

Other mandatory elements of the CLP label, such as the identification of the supplier, trade name and other supplemental information may be shown once on the label.

If the final blended mixture is not classified as hazardous, no additional information needs to be included in the use instructions.

If the final blended mixture is more hazardous than the individual component mixtures, or it has hazards not already addressed on the label, then information about this will need to be included in the use instructions (e.g. on the label or provided inside an outer packaging) and in Section 2.3 of the SDS(s).

Trade name	Trade name																										
Product type	FAST CURING ANCHORING ADHESIVE																										
Signal word for Component mixture A	Component A Danger	<p>Contains: Substance X. Flammable liquid and vapour. May be fatal if swallowed and enters airways. Causes skin irritation. Causes serious eye irritation.</p> <p>Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Wear protective gloves/eye protection/face protection. IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Do NOT induce vomiting. In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.</p>	Hazard statements for Component mixture A																								
Hazard pictograms for Component mixture A			Precautionary statements For Component mixture A																								
UFI code for Component mixture A	UFI: E600-30P1-S00Y-5079																										
Signal word for Component mixture B	Component B Warning	<p>Contains: Substance Y. May cause an allergic skin reaction. Causes serious eye irritation. Very toxic to aquatic life with long lasting effects.</p> <p>Avoid breathing vapours. Avoid release to the environment. Wear protective gloves/eye protection/face protection. If skin irritation or rash occurs: Get medical advice/ attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.</p>	Hazard statements for Component mixture B																								
Hazard pictograms for Component mixture B			Precautionary statements For Component mixture B																								
UFI code for Component mixture B	UFI: VDU1-414F-1003-1862																										
Consult most current local Product Data Sheet and Safety Data Sheets prior to any use.																											
	<table border="1"> <thead> <tr> <th>Temperature</th> <th>Gel time</th> <th>Curing time</th> </tr> </thead> <tbody> <tr> <td>+30 °C</td> <td>4 min</td> <td>35 min</td> </tr> <tr> <td>+25 °C – +30 °C</td> <td>4 min</td> <td>40 min</td> </tr> <tr> <td>+20 °C – +25 °C</td> <td>5 min</td> <td>50 min</td> </tr> <tr> <td>+10 °C – +20 °C</td> <td>6 min</td> <td>85 min</td> </tr> <tr> <td>+5 °C – +10 °C</td> <td>10 min</td> <td>145 min</td> </tr> <tr> <td>+5 °C</td> <td>18 min</td> <td>145 min</td> </tr> <tr> <td>-10 °C ¹</td> <td>30 min</td> <td>24 h</td> </tr> </tbody> </table> <p>¹ Minimum cartridge temperature: +5 °C</p>		Temperature	Gel time	Curing time	+30 °C	4 min	35 min	+25 °C – +30 °C	4 min	40 min	+20 °C – +25 °C	5 min	50 min	+10 °C – +20 °C	6 min	85 min	+5 °C – +10 °C	10 min	145 min	+5 °C	18 min	145 min	-10 °C ¹	30 min	24 h	Space for further supplemental information (e.g. instructions for use)
Temperature	Gel time	Curing time																									
+30 °C	4 min	35 min																									
+25 °C – +30 °C	4 min	40 min																									
+20 °C – +25 °C	5 min	50 min																									
+10 °C – +20 °C	6 min	85 min																									
+5 °C – +10 °C	10 min	145 min																									
+5 °C	18 min	145 min																									
-10 °C ¹	30 min	24 h																									
Supplier identity	<p>Company X Street Y Town Z Code 01234 Country Tel: +01(0)234567890 www.companyx.com</p>																										
Nominal quantity	<p>300 ml 500 g</p> <p>Best before end of XX/2019</p>																										

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

7.1 Introduction

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, suppliers have to select precautionary statements for the CLP hazard label.

Suppliers can be the following:

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

The selection of precautionary statements must be done based on CLP Articles 22 and 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 tables [of Annex IV], having regard to clarity and comprehensibility of the precautionary advice. (...)."

Neither the UN GHS nor the CLP Regulation provides for clear-cut rules on how to select precautionary statements for the label (apart from the provisions of CLP Articles 22 and 28 and the basic instructions given in the columns specifying the conditions for use in Tables 6.1-6.5 of Annex IV to CLP).

On the other hand, the number of precautionary statements under the CLP Regulation/UN GHS has more than doubled when compared to the number of S-phrases under the DSD. In a situation where selection rules are missing, an average hazardous substance listed in Annex VI to CLP could easily be assigned more than 20 precautionary statements on the label, based on the hazards of the substance (see [section 3.4](#) of this guidance document). The CLP Regulation requires that normally not more than six precautionary statements must appear on the label, unless necessary to reflect the nature and the severity of the hazards. Therefore, a substantial reduction of the number of precautionary statements must be performed, based on effective selection rules.

7.2 Methodology

The selection of precautionary statements under the CLP Regulation is based on:

- the provisions set out in CLP Articles 22 and 28, and
- the basic instructions provided in the columns containing the conditions for use in Tables 6.1-6.5 of Annex IV to CLP, and
- the instructions mentioned directly under the precautionary statements in the selection tables (see [section 7.3](#) of this guidance document).

The following approach was chosen for the selection of the precautionary statements under the CLP Regulation:

- The P-statements⁴⁹ should be selected in accordance with the rules outlined in CLP Article 28 and Part 1 of Annex IV to CLP;
- The selection of P-statements should take into account the underlying hazards and identified or foreseen conditions for use of a substance or mixture;
- If the content of two P-statements is an obvious duplication, only the most relevant statement should be selected;
- The P-statements assignment follows a “traffic light” system. The conditions for use described in this guidance document distinguish between precautionary statements that are “highly recommended”, “recommended”, “optional” and “not to be used” for the hazard label;
- A particular recommendation should be seen in the light of the original CLP conditions for use specified under the relevant precautionary statement in the selection tables;
- Two target groups, i.e. the general public and the industrial/professional users, are specified under the CLP Regulation. Where there is no explicit mention of the target group, the conditions for use apply to both the general public and industrial/professional users.

⁴⁹ Corresponding but not always identical to the former safety phrases (S-phrases) under the DSD.

- Where the use of a particular precautionary statement is (highly) recommended but some exemptions are indicated (“unless” condition), it should not be used where the conditions specified in the “unless” clause apply:

For example:

P264 (“Wash ... thoroughly after handling”) for the hazard class Skin corrosion 1 should not be used for industrial/professional users where P280 (“Wear protective gloves/protective clothing/eye protection/face protection”) has already been selected for the hazard label of the substance or mixture.

Vice versa, where a precautionary statement is only optional, it should be used where the conditions specified in the “unless” clause apply:

For example:

P410 (“Protect from sunlight”) for the hazard class Gases under pressure should be applied in case the described gases are subject to (slow) decomposition or polymerisation.

- Similarly to the previous bullet point, 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:

For example:

P260 (“Do not breathe dust/fume/gas/mist/vapours/spray”) would not be recommended for skin corrosive substances or mixtures where inhalation is unlikely to occur (e.g. for substances/mixtures that are not volatile and where inhalable particles or mists do not occur during use).

- For some hazards, the use of many specific precautionary statements will normally have to be recommended. As a consequence, the number of precautionary statements on the label will easily exceed the target number of six even for simple substances.

On the other hand, the label, as compared to the SDS, is not always the only and most appropriate means to convey a message to industrial/professional users, e.g. for P241 (“Use explosion-proof electrical/ventilating/lighting/.../equipment.”). In such cases, the guidance also refers to the SDS, typically by phrasing a recommendation for both the label and the SDS. The recommendation for inclusion on the label is then “weaker” than for the SDS, as for example P241 for flammable liquids or P373 (“DO NOT fight fire when fire reaches explosives”) for explosive hazards. In some cases, it is even recommended to put the relevant precautionary statements in the relevant section of SDS **only**;

- In relation to the physical hazards, it should always be determined whether substances or mixtures displaying these hazards are supplied to or handled by the general public. When this is not the case, the use of further precautionary statements could be de-prioritised (“weaker” recommendation);

- For certain hazard classes listed in Table 6.5 of Annex IV, the CLP Regulation requires at least one precautionary statement relating to disposal for substances or mixtures supplied to the general public, as referred to under CLP Article 28(2);
- 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":

For example:

"Highly recommended, in combination with P302 + P352 ("IF ON SKIN: Wash with plenty of water/...") for P310 ("Immediately call a POISON CENTER/doctor/...") for the hazard class Acute Tox. 1 and 2 (dermal).

Such combined statements should be counted as one P-statement.

- Additional guidance is provided for the application of the precautionary statements P101 ("If medical advice is needed, have product container or label at hand"), P102 ("Keep out of reach of children") and P103 ("Read label before use") for hazardous substances and mixtures supplied to the general public (see table in [section 7.3.1](#) of this guidance document).

It should be noted that for substances and mixtures that are classified for physical, health and environmental hazards, a selection based on the rules outlined in this guidance document may still lead to a final set that significantly exceeds the target number of six statements for the label (see [Example C](#) in [section 7.4](#) of this guidance document). Even if this can in principle be justified by CLP Article 28(3), the question remains whether the extent of the labelling information is still digestible, in particular where long combination statements appear.

Therefore, when verifying the set of P-statements selected on the basis of this guidance document, it is proposed to take into account the following principles:

- certain prevention and response statements provide more urgent advice than other statements, as rapid action may be crucial. Therefore, where similar P-statements having different priorities are assigned because of different hazards, the most stringent P-statement should be selected. This judgement can only be done on a case-by-case basis and will strongly depend on the hazards involved:

For example:

For a substance classified as acutely toxic and carcinogenic, the first aid measures for acute toxicity will take precedence over the longer term effects, i.e. P310 ("Immediately call a POISON CENTER/doctor/...") will take precedence over P311 ("Call a POISON CENTER/doctor/..."), P312 ("Call a POISON CENTRE/doctor/.../if you feel unwell") and P313 ("Get medical advice/attention").

- de-selecting statements that appear less urgent from the label and putting them in the SDS would be a better option;

- to reduce the number of P-statements, the content of the hazard statements can also be taken into account:

For example:

P222 (“Do not allow contact with air”) for the hazard classes Pyrophoric liquids and Pyrophoric solids can be omitted as the hazard statement H250 (“Catches fire spontaneously if exposed to air”) is used.

When an SDS must be compiled, the precautionary statements selected for the CLP hazard label have to be included in the SDS, under heading 2.2 “Label elements” (see the [Guidance on the compilation of safety data sheets](#)). The de-selected statements can be introduced under the relevant headings of the SDS instead, to provide the industrial or professional user with sufficient information for handling the substance or mixture safely.

7.3 Selection tables

The below selection tables (sections [7.3.1](#) to [7.3.5](#) of this guidance document) follow the format as provided in Section 3 of Annex 3 to the UN GHS. The tables are arranged according to the hazard class and category as appropriate.

This guidance document builds upon the generic provisions set out in CLP Articles 22 and 28, as well as the basic instructions provided in the columns containing the conditions for use in Tables 6.1-6.5 of Annex IV to CLP. It takes into account *i.a.* the intended uses and the physical properties of the substance or mixture.

The original CLP conditions for use are displayed in black colour under the relevant precautionary statements in the selection tables below. In contrast, the conditions that constitute EU guidance are marked with an **asterisk (★)** and in **blue colour**, in order to distinguish them from the original CLP conditions for use (see also the columns containing the conditions for use in Tables 6.1–6.5 of Annex IV to CLP).

When a **forward slash or diagonal mark “/”** appears in a precautionary statement text, it indicates that a choice has to be made between the phrases it separates:

For example:

P280 (“Wear protective gloves/protective clothing/eye protection/face protection”) could read: “Wear eye protection” or “Wear eye and face protection”.

When **three full stops “...”** appear in the precautionary statement text, they indicate that not all applicable conditions are listed. Therefore, the manufacturer or supplier needs to add the required information as appropriate.

For example:

In P312 (“Call a POISON CENTRE/doctor/.../if you feel unwell”), the use of “...” indicates that any other choice needs to be specified by manufacturer or supplier.

When **square brackets “[...]”** appear around some text in a precautionary statement, they indicate that the text in square brackets is not appropriate in every case and should be used only in certain circumstances. In these cases, conditions for use are included explaining when the text should be used:

For example:

P284 states: “[In case of inadequate ventilation] wear respiratory protection.” This P-statement is given with the following condition for use: “- *text in square brackets may be used if additional information is provided with the chemical at the point of use that explains what type of ventilation would be adequate for safe use.*”. The application of this condition should be interpreted as follows: if additional information is provided with the chemical explaining what type of ventilation would be adequate for safe use, the text in square brackets **may** be used. In this case, P284 would read: “In case of inadequate ventilation wear respiratory protection.” However, if the chemical is supplied without such information, the text in square brackets should **not** be used, and P284 should read: “wear respiratory protection”.

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 must be retained in the combined phrases. The selection tables are followed by four examples (A, B, C and D) of substances, illustrating the selection of precautionary statements for the label (see [section 7.4](#) of this guidance document).

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
- ★ Applies also to packagings that are to be fitted with child resistant fastening (Annex II, section 3.1.1.1)

P103

Read label before use.

- Consumer products

- ★ Optional, but may be required by other EU legislation

7.3.2 Specific precautionary statements for physical hazards

7.3.2.1 Explosives

Hazard category	Signal word	Hazard statement
Unstable explosive	Danger	H200 Unstable explosive



Precautionary Statements			
Prevention	Response	Storage	Disposal
<p>P201</p> <p>Obtain special instructions before use.</p> <p>★ Highly recommended</p> <p>P250</p> <p>Do not subject to grinding/shock/friction/...</p> <p>★ if the explosive is mechanically sensitive</p> <p>...Manufacturer/supplier to specify applicable rough handling.</p> <p>★ Highly recommended if the explosive is mechanically sensitive</p> <p>★ Optional if the explosive is not mechanically sensitive</p>	<p>P370 + P372 + P380 + P373</p> <p>In case of fire: Explosion risk. Evacuate area. DO NOT fight fire when fire reaches explosives.</p> <p>★ Highly recommended</p>	<p>P401</p> <p>Store in accordance with...</p> <p>... Manufacturer/supplier to specify local/regional/national/international regulations as applicable.</p> <p>★ Highly recommended for inclusion in the safety data sheet. Specify the applicable regulation.</p>	<p>P501</p> <p>Dispose of contents/container to ...</p> <p>... in accordance with local/regional/national/international regulations (to be specified).</p> <p>Manufacturer/supplier to specify whether disposal requirements apply to contents, container or both.</p> <p>★ Recommended for inclusion in the safety data sheet if there are specific disposal requirements above the normal expectation for the disposal of chemicals.</p>

<p>P280</p> <p>Wear protective gloves/protective clothing/eye protection/face protection.</p> <p>Manufacturer/supplier to specify the appropriate type of equipment.</p> <p>★ Highly recommended to apply the full wording of P280</p>			
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7.3.2.1 Explosives (continued)

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
<p>P210</p> <p>Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</p> <p>★ Highly recommended</p> <p>P230</p> <p>Keep wetted with ...</p> <p>- for substances and mixtures which are wetted, diluted, dissolved or suspended with a phlegmatizer in order to reduce or suppress their explosive properties (desensitized explosives)</p> <p>... Manufacturer/supplier to specify appropriate material.</p> <p>★ Highly recommended</p> <p>P234</p> <p>Keep only in original packaging</p> <p>★ Highly recommended</p>	<p>P370 + P372 + P380 + P373</p> <p>In case of fire: Explosion risk. Evacuate area. DO NOT fight fire when fire reaches explosives.</p> <p>★ Highly recommended</p>	<p>P401</p> <p>Store in accordance with...</p> <p>... Manufacturer/supplier to specify local/regional/national/international regulations as applicable.</p> <p>★ Highly recommended for inclusion in the safety data sheet. Specify the applicable regulation.</p>	<p>P501</p> <p>Dispose of contents/container to ...</p> <p>... in accordance with local/regional/national/international regulations (to be specified).</p> <p>Manufacturer/supplier to specify whether disposal requirements apply to contents, container or both.</p> <p>★ 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.</p> <p>★ Mandatory when supplied to the general public (where the Member State allows such supply).</p>

<p>P240</p> <p>Ground and bond container and receiving equipment.</p> <p>- if the explosive is electrostatically sensitive.</p> <ul style="list-style-type: none">★ Optional unless other conditions deem it necessary★ Recommended for inclusion in the safety data sheet <p>P250</p> <p>Do not subject to grinding/shock/friction/... .</p> <ul style="list-style-type: none">★ if the explosive is mechanically sensitive <p>...Manufacturer/supplier to specify applicable rough handling.</p> <ul style="list-style-type: none">★ Highly recommended if the explosive is mechanically sensitive★ Optional if the explosive is not mechanically sensitive			
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<p>P280</p> <p>Wear protective gloves/protective clothing/eye protection/face protection.</p> <p>Manufacturer/supplier to specify the appropriate type of equipment.</p> <ul style="list-style-type: none">★ 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★ Recommended for explosives supplied to the general public (where Member States allows such supply).			
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7.3.2.1 Explosives (continued)

Hazard category	Signal word	Hazard statement
Division 1.4	Warning	H204 Fire or projection hazard



Precautionary Statements			
Prevention	Response	Storage	Disposal
<p>P210</p> <p>Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</p> <p>★ Highly recommended</p>	<p>P370 + P372 + P380 + P373</p> <p>In case of fire: Explosion risk. Evacuate area. DO NOT fight fire when fire reaches explosives.</p> <p>- except for explosives of division 1.4 (compatibility group S) in transport packaging.</p> <p>★ Highly recommended</p>	<p>P401</p> <p>Store in accordance with...</p> <p>... Manufacturer/supplier to specify local/regional/national/international regulations as applicable.</p> <p>★ Highly recommended for inclusion in the safety data sheet. Specify the applicable regulation.</p>	<p>P501</p> <p>Dispose of contents/container to ...</p> <p>... in accordance with local/regional/national/international regulations (to be specified).</p> <p>Manufacturer/supplier to specify whether disposal requirements apply to contents, container or both.</p> <p>★ 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.</p> <p>★ Mandatory when supplied to the general public</p>
<p>P234</p> <p>Keep only in original packaging</p> <p>★ Highly recommended</p>	<p>P370 + P380 + P375</p> <p>In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion.</p> <p>- for explosives of division 1.4 (compatibility group S) in transport packaging.</p> <p>★ Highly recommended</p>		
<p>P240</p> <p>Ground and bond container and receiving equipment.</p> <p>- if the explosive is electrostatically sensitive.</p> <p>★ Optional unless other conditions deem it necessary</p> <p>★ Recommended for inclusion in the safety data sheet</p>			

<p>P250</p> <p>Do not subject to grinding/shock/friction/... .</p> <ul style="list-style-type: none"> ★ if the explosive is mechanically sensitive <p>...Manufacturer/supplier to specify applicable rough handling.</p> <ul style="list-style-type: none"> ★ Highly recommended if the explosive is mechanically sensitive ★ Optional if the explosive is not mechanically sensitive <p>P280</p> <p>Wear protective gloves/protective clothing/ eye protection/ face protection.</p> <p>Manufacturer/supplier to specify the appropriate type of equipment.</p> <ul style="list-style-type: none"> ★ 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 ★ Recommended for explosives supplied to the general public (where Member States allows such supply). 			(where the Member State allows such supply).
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7.3.2.1 Explosives (continued)

Hazard category	Signal word	Hazard statement	
Division 1.5	Danger	H205 May mass explode in fire	No additional hazard pictogram

Precautionary Statements			
Prevention	Response	Storage	Disposal
<p>P210</p> <p>Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</p> <p>★ Highly recommended</p> <p>P230</p> <p>Keep wetted with ...</p> <p>- for substances and mixtures which are wetted, diluted, dissolved or suspended with a phlegmatizer in order to reduce or suppress their explosive properties (desensitized explosives)</p> <p>... Manufacturer/supplier to specify appropriate material.</p> <p>★ Highly recommended</p> <p>P234</p> <p>Keep only in original packaging</p> <p>★ Highly recommended</p>	<p>P370 + P372 + P380 + P373</p> <p>In case of fire: Explosion risk. Evacuate area. DO NOT fight fire when fire reaches explosives.</p> <p>★ Highly recommended</p>	<p>P401</p> <p>Store in accordance with...</p> <p>... Manufacturer/supplier to specify local/regional/national/international regulations as applicable.</p> <p>★ Highly recommended for inclusion in the safety data sheet. Specify the applicable regulation.</p>	<p>P501</p> <p>Dispose of contents/container to ...</p> <p>... in accordance with local/regional/national/international regulations (to be specified).</p> <p>Manufacturer/supplier to specify whether disposal requirements apply to contents, container or both.</p> <p>★ 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.</p> <p>★ Mandatory when supplied to the general public (where the Member State allows such supply).</p>

<p>P240</p> <p>Ground and bond container and receiving equipment.</p> <p>- if the explosive is electrostatically sensitive.</p> <ul style="list-style-type: none"> ★ Optional unless other conditions deem it necessary ★ Recommended for inclusion in the safety data sheet <p>P250</p> <p>Do not subject to grinding/shock/friction/... .</p> <p>- if the explosive is mechanically sensitive</p> <p>...Manufacturer/supplier to specify applicable rough handling.</p> <ul style="list-style-type: none"> ★ Highly recommended if the explosive is mechanically sensitive ★ Optional if the explosive is not mechanically sensitive <p>P280</p> <p>Wear protective gloves/protective clothing/eye protection/ face protection.</p> <p>Manufacturer/supplier to specify the appropriate type of equipment.</p>			
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<ul style="list-style-type: none"> ★ 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 ★ Recommended for explosives supplied to the general public (where Member States allows such supply) 			
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Notes on the labelling of Explosives

Unpackaged explosives or explosives repackaged in packaging other than the original or similar packaging must include all of the following label elements:

the pictogram: exploding bomb;

the signal word "Danger"; and

the hazard statement: 'Explosive; mass explosion hazard'

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

Substances and mixtures, as supplied, with a positive result in Test Series 2 in Part I, Section 12, of the UN RTDG, Manual of Tests and Criteria, which are exempted from classification as explosives (based on a negative result in Test Series 6 in Part I, Section 16 of the UN RTDG, Manual of Test and Criteria) still have explosive properties. The user must be informed of these intrinsic explosive properties because they have to be considered for handling – especially if the substance or mixture is removed from its packaging or is repackaged – and for storage. For this reason, the explosive properties of the substance or mixture must be communicated in Section 2 and Section 9 of the safety data sheet and other sections of the safety data sheet, as appropriate.

7.3.2.2 Flammable gases (including chemically unstable gases)

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



Pictogram for hazard category 1 only.

Precautionary Statements			
Prevention	Response	Storage	Disposal
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. ★ Highly recommended	P377 Leaking gas fire: Do not extinguish, unless leak can be stopped safely. ★ Highly recommended P381 In case of leakage, eliminate all ignition sources. ★ Recommended	P403 Store in a well-ventilated place. ★ Highly recommended	

7.3.2.2 Flammable gases (including chemically unstable gases) (continued)

Hazard category	Signal word	Hazard statement	No additional hazard pictogram
A	<i>No additional signal word</i>	H230 May react explosively even in the absence of air	
B	<i>No additional signal word</i>	H231 May react explosively even in the absence of air at elevated pressure and/or temperature	

Precautionary Statements			
Prevention	Response	Storage	Disposal
P202 Do not handle until all safety precautions have been read and understood. ★ Highly recommended			

Note: This table lists only the precautionary statement that is assigned due to the chemical instability of the gas. For other precautionary statements that are assigned based on the flammability see the respective table for flammable gases (of cat. 1 and 2) on the previous page.

7.3.2.3 Aerosols

Hazard category	Signal word	Hazard statement
1	Danger	H222 Extremely flammable aerosol H229 Pressurised container: May burst if heated
2	Warning	H223 Flammable aerosol H229 Pressurised container: May burst if heated



Precautionary Statements			
Prevention	Response	Storage	Disposal
<p>P210</p> <p>Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</p> <p>★ Assigned in accordance with Directive 75/324/EEC</p> <p>P211</p> <p>Do not spray on an open flame or other ignition source.</p> <p>★ Assigned in accordance with Directive 75/324/EEC</p> <p>P251</p> <p>Do not pierce or burn, even after use.</p> <p>★ Assigned in accordance with Directive 75/324/EEC</p>		<p>P410 + P412</p> <p>Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.</p> <p>Manufacturer/supplier to use applicable temperature scale</p> <p>★ Assigned in accordance with Directive 75/324/EEC</p>	

7.3.2.3 Aerosols (continued)

Hazard category	Signal word	Hazard statement
3	Warning	H229 Pressurised container: May burst if heated

*No
additional
hazard
pictogram*

Precautionary Statements			
Prevention	Response	Storage	Disposal
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. ★ Assigned in accordance with Directive 75/324/EEC		P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122°F. Manufacturer/supplier to use applicable temperature scale ★ Assigned in accordance with Directive 75/324/EEC	
P251 Do not pierce or burn, even after use. ★ Assigned in accordance with Directive 75/324/EEC			

7.3.2.4 Oxidising gases

Hazard category	Signal word	Hazard statement
1	Danger	H270 May cause or intensify fire; oxidiser



Precautionary Statements			
Prevention	Response	Storage	Disposal
P220 Keep away from clothing and other combustible materials. ★ Highly recommended	P370 + P376 In case of fire: Stop leak if safe to do so. ★ Optional ★ Recommended for inclusion in the safety data sheet.	P403 Store in a well-ventilated place. ★ Highly recommended	
P244 Keep valves and fittings free from oil and grease. ★ Highly recommended			

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
		P410 + P403 Protect from sunlight. Store in a well-ventilated place. - P410 may be omitted for gases filled in transportable gas cylinders in accordance with packing instruction P200 of the UN RTDG, unless those gases are subject to (slow) decomposition or polymerisation ★ Optional	

7.3.2.5 Gases under pressure (continued)

Hazard category	Signal word	Hazard statement
Refrigerated liquefied gas	Warning	H281 Contains refrigerated gas; may cause cryogenic burns or injury



Precautionary Statements			
Prevention	Response	Storage	Disposal
P282 Wear cold insulating gloves and either face shield or eye protection. ★ 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 or a face shield should be indicated in the safety data sheet.	P336 + P315 Thaw frosted parts with lukewarm water. Do not rub affected area. Get immediate medical advice/attention. ★ Recommended	P403 Store in a well-ventilated place. ★ Optional	

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
<p>P210</p> <p>Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</p> <p>★ Highly recommended</p> <p>P233</p> <p>Keep container tightly closed.</p> <p>- if the liquid is volatile and may generate an explosive atmosphere</p> <p>★ Highly recommended for category 1, unless P404 has already been assigned</p> <p>★ Recommended for category 2, unless P404 has already been assigned</p> <p>★ Optional for category 3</p>	<p>P303 + P361 + P353</p> <p>IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].</p> <p>- text in square brackets to be included where the manufacturer/supplier considers it appropriate for the specific chemical</p> <p>★ Optional unless deemed necessary, e.g. due to the risk of generating a potentially explosive atmosphere</p> <p>P370 + P378</p> <p>In case of fire: Use ... to extinguish.</p> <p>- if water increases risk.</p> <p>...Manufacturer/supplier to specify appropriate media.</p> <p>★ Highly recommended if specific extinguishing media are required or appropriate</p>	<p>P403 + P235</p> <p>Store in a well-ventilated place. Keep cool.</p> <p>- for flammable liquids Category 1 and other flammable liquids that are volatile and may generate an explosive atmosphere.</p> <p>★ Highly recommended</p>	<p>P501</p> <p>Dispose of contents/container to ...</p> <p>... in accordance with local/regional/national/international regulations (to be specified).</p> <p>Manufacturer/supplier to specify whether disposal requirements apply to contents, container or both.</p> <p>★ Mandatory 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.</p> <p>★ Recommended for industrial / professional users if there</p>

<p>P235</p> <p>Keep cool.</p> <p>- for flammable liquids category 1 and other flammable liquids that are volatile and may generate an explosive atmosphere</p> <p>★ Highly recommended, unless P403 + P235 is assigned.</p> <p>P240</p> <p>Ground and bond container and receiving equipment.</p> <p>- if the liquid is volatile and may generate an explosive atmosphere</p> <p>★ Optional unless other conditions deem it necessary</p> <p>★ Recommended for inclusion in the safety data sheet</p> <p>P241</p> <p>Use explosion-proof [electrical/ventilating/ lighting/...] equipment.</p> <p>- if the liquid is volatile and may generate an explosive atmosphere</p> <p>- text in square brackets may be used to specify specific electrical, ventilating, lighting or other equipment if necessary and as appropriate.</p> <p>★ Optional unless other conditions deem it necessary</p> <p>★ Recommended for inclusion in the safety data sheet</p>			<p>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.</p>
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<p>P242</p> <p>Use non-sparking tools.</p> <p>- if the liquid is volatile and may generate an explosive atmosphere and if the minimum ignition energy is very low. (This applies to substances and mixtures where the ignition energy is <0.1 mJ, e.g. carbon disulphide).</p> <ul style="list-style-type: none">★ Optional unless other conditions deem it necessary★ Recommended for inclusion in the safety data sheet <p>P243</p> <p>Take action to prevent static discharges.</p> <p>- if the liquid is volatile and may generate an explosive atmosphere</p> <ul style="list-style-type: none">★ Optional unless other conditions deem it necessary★ Recommended for inclusion in the safety data sheet <p>P280</p> <p>Wear protective gloves/protective clothing/eye protection/face protection.</p> <p>Manufacturer/supplier to specify the appropriate type of equipment.</p> <ul style="list-style-type: none">★ Optional			
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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
<p>P210</p> <p>Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</p> <p>★ Highly recommended</p> <p>P240</p> <p>Ground and bond container and receiving equipment.</p> <p>- if the solid is electrostatically sensitive</p> <p>★ Optional unless other conditions deem it necessary</p> <p>★ Recommended for inclusion in the safety data sheet</p>	<p>P370 + P378</p> <p>In case of fire: Use ... to extinguish.</p> <p>- if water increases risk.</p> <p>... Manufacturer/supplier to specify appropriate media.</p> <p>★ Highly recommended if specific extinguishing media are required or appropriate</p>		

<p>P241</p> <p>Use explosion-proof [electrical/ventilating/lighting/...] equipment.</p> <p>- if dust clouds can occur.</p> <p>- text in square brackets may be used to specify specific electrical, ventilating, lighting or other equipment if necessary and as appropriate.</p> <ul style="list-style-type: none">★ Optional unless other conditions deem it necessary★ Recommended for inclusion in the safety data sheet <p>P280</p> <p>Wear protective gloves/protective clothing/eye protection/ face protection.</p> <p>Manufacturer/supplier to specify the appropriate type of equipment.</p> <ul style="list-style-type: none">★ Optional			
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7.3.2.8 Self-reactive substances and mixtures

Hazard category	Signal word	Hazard statement
Type A	Danger	H240 Heating may cause an explosion



Precautionary Statements			
Prevention	Response	Storage	Disposal
<p>P210</p> <p>Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</p> <p>★ Highly recommended</p> <p>P234</p> <p>Keep only in original packaging.</p> <p>★ Highly recommended where the packaging is important for preventing or suppressing the effect of dangerous reactions or explosion</p> <p>P235</p> <p>Keep cool.</p> <p>- may be omitted if P411 is given on the label</p> <p>★ Recommended</p>	<p>P370 + P372 + P380 + P373</p> <p>In case of fire: Explosion risk. Evacuate area. DO NOT fight fire when fire reaches explosives</p> <p>★ Highly recommended</p>	<p>P403</p> <p>Store in a well-ventilated place.</p> <p>- except for temperature controlled self-reactive substances and mixtures or organic peroxides because condensation and consequent freezing may take place</p> <p>★ Highly recommended</p> <p>P411</p> <p>Store at temperatures not exceeding ...°C/...°F.</p> <p>- if temperature control is required (according to CLP Annex I, section 2.8.2.4 or 2.15.2.3) or if otherwise deemed necessary.</p> <p>... Manufacturer/supplier to specify temperature using the applicable temperature scale.</p>	<p>P501</p> <p>Dispose of contents/container to ...</p> <p>... in accordance with local/regional/national/international regulations (to be specified).</p> <p>Manufacturer/supplier to specify whether disposal requirements apply to contents, container or both.</p> <p>★ 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.</p>

<p>P240</p> <p>Ground and bond container and receiving equipment.</p> <p>- if electrostatically sensitive and able to generate an explosive atmosphere</p> <ul style="list-style-type: none"> ★ Optional unless other conditions deem it necessary ★ Recommended for inclusion in the safety data sheet <p>P280</p> <p>Wear protective gloves/protective clothing/eye protection/face protection.</p> <p>Manufacturer/supplier to specify the appropriate type of equipment.</p> <ul style="list-style-type: none"> ★ Highly recommended 		<ul style="list-style-type: none"> ★ Highly recommended <p>P420</p> <p>Store separately.</p> <ul style="list-style-type: none"> ★ 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. 	
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7.3.2.8 Self-reactive substances and mixtures (continued)

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



Precautionary Statements			
Prevention	Response	Storage	Disposal
<p>P210</p> <p>Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</p> <p>★ Highly recommended</p> <p>P234</p> <p>Keep only in original packaging.</p> <p>★ Highly recommended</p> <p>P235</p> <p>Keep cool.</p> <p>- may be omitted if P411 is given on the label</p> <p>★ Recommended</p> <p>P240</p>	<p>P370 + P380 + P375 [+ P378]⁵⁰</p> <p>In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion. [Use ... to extinguish].</p> <p>- text in square brackets to be used if water increases risk.</p> <p>...Manufacturer/supplier to specify appropriate media.</p> <p>★ Highly recommended</p> <p>★ Text in square brackets is highly recommended if specific extinguishing media are required or appropriate</p>	<p>P403</p> <p>Store in a well-ventilated place.</p> <p>- except for temperature controlled self-reactive substances and mixtures or organic peroxides because condensation and consequent freezing may take place</p> <p>★ Highly recommended</p> <p>P411</p> <p>Store at temperatures not exceeding ...°C/...°F.</p> <p>- if temperature control is required (according to CLP Annex I, section 2.8.2.4 or 2.15.2.3) or if otherwise deemed necessary.</p>	<p>P501</p> <p>Dispose of contents/container to ...</p> <p>... in accordance with local/regional/national/international regulations (to be specified).</p> <p>Manufacturer/supplier to specify whether disposal requirements apply to contents, container or both.</p> <p>★ Mandatory 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</p>

⁵⁰ The use of square brackets is explained in [section 7.3](#) of this guidance document.

<p>Ground and bond container and receiving equipment.</p> <p>- if electrostatically sensitive and able to generate an explosive atmosphere</p> <ul style="list-style-type: none"> ★ Optional unless other conditions deem it necessary ★ Recommended for inclusion in the safety data sheet <p>P280</p> <p>Wear protective gloves/protective clothing/eye protection/face protection.</p> <p>Manufacturer/supplier to specify the appropriate type of equipment.</p> <ul style="list-style-type: none"> ★ Highly recommended 		<p>... Manufacturer/supplier to specify temperature.</p> <ul style="list-style-type: none"> ★ Highly recommended <p>P420</p> <p>Store separately.</p> <ul style="list-style-type: none"> ★ 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 	<p>reference to the applicable legislation is not necessary.</p> <ul style="list-style-type: none"> ★ 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.
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7.3.2.8 Self-reactive substances and mixtures (continued)

Hazard category	Signal word	Hazard statement
Type C	Danger	H242 Heating may cause a fire
Type D	Danger	H242 Heating may cause a fire
Type E	Warning	H242 Heating may cause a fire
Type F	Warning	H242 Heating may cause a fire

Precautionary Statements			
Prevention	Response	Storage	Disposal
<p>P210</p> <p>Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</p> <p>★ Highly recommended</p> <p>P234</p> <p>Keep only in original packaging.</p> <p>★ Highly recommended</p> <p>P235</p> <p>Keep cool.</p> <p>- may be omitted if P411 is given on the label</p> <p>★ Recommended</p>	<p>P370 + P378</p> <p>In case of fire: Use ... to extinguish.</p> <p>- if water increases risk.</p> <p>Manufacturer/supplier to specify appropriate media.</p> <p>★ Highly recommended if specific extinguishing media are required or appropriate</p>	<p>P403</p> <p>Store in a well-ventilated place.</p> <p>- except for temperature controlled self-reactive substances and mixtures or organic peroxides because condensation and consequent freezing may take place</p> <p>★ Highly recommended</p> <p>P411</p> <p>Store at temperatures not exceeding ...°C/...°F.</p> <p>- if temperature control is required (according to CLP Annex I, section 2.8.2.4 or</p>	<p>P501</p> <p>Dispose of contents/container to ...</p> <p>... in accordance with local/regional/national/international regulations (to be specified).</p> <p>Manufacturer/supplier to specify whether disposal requirements apply to contents, container or both.</p> <p>★ Mandatory 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.</p>

<p>P240</p> <p>Ground and bond container and receiving equipment.</p> <p>- if electrostatically sensitive and able to generate an explosive atmosphere</p> <ul style="list-style-type: none"> ★ Optional unless other conditions deem it necessary ★ Recommended for inclusion in the safety data sheet <p>P280</p> <p>Wear protective gloves/protective clothing/eye protection/face protection.</p> <p>Manufacturer/supplier to specify the appropriate type of equipment.</p> <ul style="list-style-type: none"> ★ Highly recommended 		<p>2.15.2.3) or if otherwise deemed necessary.</p> <p>... Manufacturer/supplier to specify temperature.</p> <ul style="list-style-type: none"> ★ Highly recommended <p>P420</p> <p>Store separately.</p> <ul style="list-style-type: none"> ★ 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 	<ul style="list-style-type: none"> ★ 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.
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7.3.2.9 Pyrophoric liquids

Hazard category	Signal word	Hazard statement
1	Danger	H250 Catches fire spontaneously if exposed to air



Precautionary Statements			
Prevention	Response	Storage	Disposal
<p>P210</p> <p>Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</p> <p>★ Highly recommended</p> <p>P222</p> <p>Do not allow contact with air.</p> <p>- if emphasis of the hazard statement is deemed necessary</p> <p>★ Optional</p> <p>P231 + P232</p> <p>Handle and store contents under inert gas/...</p> <p>Protect from moisture</p> <p>...Manufacturer/supplier to specify appropriate liquid or gas if "inert gas" is not appropriate.</p> <p>★ Recommended</p> <p>★ Highly recommended for inclusion in the safety data sheet</p>	<p>P302 + P334</p> <p>IF ON SKIN: Immerse in cool water or wrap in wet bandages.</p> <p>★ Highly recommended</p> <p>P370 + P378</p> <p>In case of fire: Use ... to extinguish.</p> <p>- if water increases risk.</p> <p>...Manufacturer/supplier to specify appropriate media.</p> <p>★ Highly recommended if specific extinguishing media are required or appropriate</p>		

<p>P233 Keep container tightly closed ★ Highly recommended</p> <p>P280 Wear protective gloves/protective clothing/eye protection/face protection. Manufacturer/supplier to specify the appropriate type of equipment. ★ Highly recommended</p>			
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7.3.2.10 Pyrophoric solids

Hazard category	Signal word	Hazard statement
1	Danger	H250 Catches fire spontaneously if exposed to air



Precautionary Statements			
Prevention	Response	Storage	Disposal
<p>P210</p> <p>Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</p> <p>★ Highly recommended</p> <p>P222</p> <p>Do not allow contact with air.</p> <p>-if emphasis of the hazard statement is deemed necessary</p> <p>★ Optional</p> <p>P231 + P232</p> <p>Handle and store contents under inert gas/... Protect from moisture</p> <p>...Manufacturer/supplier to specify appropriate liquid or gas if "inert gas" is not appropriate.</p> <p>★ Recommended</p>	<p>P302 + P335 + P334</p> <p>IF ON SKIN: Brush off loose particles from skin. Immerse in cool water or wrap in wet bandages.</p> <p>★ Highly recommended</p> <p>P370 + P378</p> <p>In case of fire: Use ... to extinguish.</p> <p>- if water increases risk.</p> <p>...Manufacturer/supplier to specify appropriate media.</p> <p>★ Highly recommended if specific extinguishing media are required or appropriate</p>		

<p>★ Highly recommended for inclusion in the safety data sheet</p> <p>P233</p> <p>Keep container tightly closed</p> <p>★ Highly recommended</p> <p>P280</p> <p>Wear protective gloves/protective clothing/eye protection/face protection.</p> <p>Manufacturer/supplier to specify the appropriate type of equipment.</p> <p>★ Highly recommended</p>			
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7.3.2.11 Self-heating substances and mixtures

Hazard category	Signal word	Hazard statement
1	Danger	H251 Self-heating; may catch fire
2	Warning	H252 Self-heating in large quantities; may catch fire



Precautionary Statements			
Prevention	Response	Storage	Disposal
<p>P235</p> <p>Keep cool.</p> <p>- may be omitted if P413 is given on the label</p> <p>★ Highly recommended for the general public</p> <p>P280</p> <p>Wear protective gloves/protective clothing/eye protection/face protection.</p> <p>Manufacturer/supplier to specify the appropriate type of equipment.</p> <p>★ Optional</p>		<p>P407</p> <p>Maintain air gap between stacks or pallets.</p> <p>★ Highly recommended</p> <p>P413</p> <p>Store bulk masses greater than ... kg/...lbs at temperatures not exceeding ...°C/...°F.</p> <p>... Manufacturer/supplier to specify mass and temperature using applicable scale.</p> <p>★ Highly recommended if the manufacturer has specific information</p> <p>P420</p> <p>Store separately.</p> <p>★ 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</p>	

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



Hazard category	Signal word	Hazard statement
1	Danger	H260 In contact with water releases flammable gases which may ignite spontaneously
2	Danger	H261 In contact with water releases flammable gases

Precautionary Statements			
Prevention	Response	Storage	Disposal
<p>P223</p> <p>Do not allow contact with water.</p> <p>- if emphasis of the hazard statement is deemed necessary</p> <p>★ Optional</p> <p>P231 + P232</p> <p>Handle and store contents under inert gas/... Protect from moisture.</p> <p>- if the substance or mixture reacts readily with moisture in air.</p> <p>...Manufacturer/supplier to specify appropriate liquid or gas if "inert gas" is not appropriate</p> <p>★ Highly recommended where special emphasis is required</p>	<p>P302 + P335 + P334</p> <p>IF ON SKIN: Brush off loose particles from skin. Immerse in cool water.</p> <p>★ Highly recommended</p> <p>P370 + P378</p> <p>In case of fire: Use ... to extinguish.</p> <p>- if water increases risk.</p> <p>... Manufacturer/supplier to specify appropriate media.</p> <p>★ Highly recommended if specific extinguishing media are required or appropriate</p>	<p>P402 + P404</p> <p>Store in a dry place. Store in a closed container.</p> <p>★ Recommended, unless P231 has already been assigned</p> <p>★ Highly recommended for inclusion in the safety data sheet</p>	<p>P501</p> <p>Dispose of contents/container to ...</p> <p>... in accordance with local/regional/national/international regulations (to be specified).</p> <p>Manufacturer/supplier to specify whether disposal requirements apply to contents, container or both.</p> <p>★ Mandatory 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.</p>

<p>P280</p> <p>Wear protective gloves/protective clothing/eye protection/face protection.</p> <p>Manufacturer/supplier to specify the appropriate type of equipment.</p> <p>★ Recommended</p>			<p>★ 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.</p>
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7.3.2.12 Substances and mixtures which, in contact with water, emit flammable gases (continued)

Hazard category	Signal word	Hazard statement
3	Warning	H261 In contact with water releases flammable gases



Precautionary Statements			
Prevention	Response	Storage	Disposal
<p>P231 + P232</p> <p>Handle and store contents under inert gas/... Protect from moisture.</p> <p>- if the substance or mixture reacts readily with moisture in air.</p> <p>...Manufacturer/supplier to specify appropriate liquid or gas if "inert gas" is not appropriate</p> <p>★ Highly recommended where special emphasis is required</p> <p>P280</p> <p>Wear protective gloves/protective clothing/eye protection/face protection.</p> <p>Manufacturer/supplier to specify the appropriate type of equipment.</p> <p>★ Recommended</p>	<p>P370 + P378</p> <p>In case of fire: Use ... to extinguish.</p> <p>- if water increases risk.</p> <p>... Manufacturer/supplier to specify appropriate media.</p> <p>★ Highly recommended if specific extinguishing media are required or appropriate</p>	<p>P402 + P404</p> <p>Store in a dry place. Store in a closed container.</p> <p>★ Recommended, unless P231 has already been assigned</p> <p>★ Highly recommended for inclusion in the safety data sheet</p>	<p>P501</p> <p>Dispose of contents/container to ...</p> <p>... in accordance with local/regional/national/international regulations (to be specified).</p> <p>Manufacturer/supplier to specify whether disposal requirements apply to contents, container or both.</p> <p>★ Mandatory 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.</p> <p>★ 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.</p>

7.3.2.13 Oxidising liquids

Hazard category	Signal word	Hazard statement
1	Danger	H271 May cause fire or explosion; strong oxidizer



Precautionary Statements			
Prevention	Response	Storage	Disposal
<p>P210</p> <p>Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</p> <p>★ Highly recommended</p>	<p>P306 + P360</p> <p>IF ON CLOTHING: Rinse immediately contaminated clothing and skin with plenty of water before removing clothes.</p> <p>★ Recommended</p>	<p>P420</p> <p>Store separately.</p> <p>★ 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</p> <p>★ Optional where P220 has already been assigned</p>	<p>P501</p> <p>Dispose of contents/container to ...</p> <p>... in accordance with local/regional/national/international regulations (to be specified).</p> <p>Manufacturer/supplier to specify whether disposal requirements apply to contents, container or both.</p> <p>★ Mandatory 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.</p> <p>★ Recommended for inclusion in the safety data sheet if there are specific disposal requirements above the normal expectation for the disposal of chemicals</p>
<p>P220</p> <p>Keep away from clothing and other combustible materials.</p> <p>★ Highly recommended</p>	<p>P371 + P380 + P375</p> <p>In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.</p> <p>★ Highly recommended</p>		
<p>P280</p> <p>Wear protective gloves/protective clothing/eye protection/ face protection.</p> <p>Manufacturer/supplier to specify the appropriate type of equipment.</p> <p>★ Recommended</p>	<p>P370 + P378</p> <p>In case of fire: Use ... to extinguish.</p> <p>- if water increases risk.</p> <p>... Manufacturer/supplier to specify appropriate media.</p>		

<p>P283</p> <p>Wear fire resistant or flame retardant clothing.</p> <p>★ Recommended for inclusion in the safety data sheet</p>	<p>★ Highly recommended if specific extinguishing media are required or appropriate</p>		
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7.3.2.13 Oxidising liquids (continued)

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



Precautionary Statements			
Prevention	Response	Storage	
<p>P210</p> <p>Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</p> <p>★ Highly recommended</p> <p>P220</p> <p>Keep away from clothing and other combustible materials.</p> <p>★ Highly recommended</p> <p>P280</p> <p>Wear protective gloves/protective clothing/eye protection/ face protection.</p> <p>Manufacturer/supplier to specify the appropriate type of equipment.</p> <p>★ Recommended</p>	<p>P370 + P378</p> <p>In case of fire: Use ... to extinguish.</p> <p>- if water increases risk.</p> <p>... Manufacturer/supplier to specify appropriate media.</p> <p>★ Highly recommended if specific extinguishing media are required or appropriate</p>		<p>P501</p> <p>Dispose of contents/container to ...</p> <p>... in accordance with local/regional/national/international regulations (to be specified).</p> <p>Manufacturer/supplier to specify whether disposal requirements apply to contents, container or both.</p> <p>★ Mandatory 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.</p> <p>★ 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.</p>

7.3.2.14 Oxidising solids

Hazard category	Signal word	Hazard statement
1	Danger	H271 May cause fire or explosion; strong oxidizer



Precautionary Statements			
Prevention	Response	Storage	Disposal
<p>P210</p> <p>Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</p> <p>★ Highly recommended</p>	<p>P306 + P360</p> <p>IF ON CLOTHING: Rinse immediately contaminated clothing and skin with plenty of water before removing clothes.</p> <p>★ Recommended</p>		<p>P501</p> <p>Dispose of contents/container to ...</p> <p>... in accordance with local/regional/national/international regulations (to be specified).</p>
<p>P220</p> <p>Keep away from clothing and other combustible materials.</p> <p>★ Highly recommended</p>	<p>P371 + P380 + P375</p> <p>In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.</p> <p>★ Highly recommended</p>		<p>Manufacturer/supplier to specify whether disposal requirements apply to contents, container or both.</p> <p>★ Mandatory 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.</p>
<p>P280</p> <p>Wear protective gloves/protective clothing/eye protection/face protection.</p> <p>Manufacturer/supplier to specify the appropriate type of equipment.</p> <p>★ Recommended</p>	<p>P370 + P378</p> <p>In case of fire: Use ... to extinguish.</p> <p>- if water increases risk.</p>		<p>★ 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.</p>
<p>P283</p> <p>Wear fire resistant or flame retardant clothing.</p> <p>★ Recommended for inclusion in the safety data sheet</p>	<p>... Manufacturer/supplier to specify appropriate media.</p> <p>★ Highly recommended if specific extinguishing media are required or appropriate</p>		

7.3.2.14 Oxidising solids (continued)

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



Precautionary Statements			
Prevention	Response	Storage	Disposal
<p>P210</p> <p>Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</p> <p>★ Highly recommended</p> <p>P220</p> <p>Keep away from clothing and other combustible materials.</p> <p>★ Highly recommended</p> <p>P280</p> <p>Wear protective gloves/protective clothing/eye protection/face protection.</p> <p>Manufacturer/supplier to specify the appropriate type of equipment.</p> <p>★ Recommended</p>	<p>P370 + P378</p> <p>In case of fire: Use ... to extinguish.</p> <p>- if water increases risk.</p> <p>... Manufacturer/supplier to specify appropriate media.</p> <p>★ Highly recommended if specific extinguishing media are required or appropriate</p>		<p>P501</p> <p>Dispose of contents/container to ...</p> <p>... in accordance with local/regional/national/international regulations (to be specified).</p> <p>Manufacturer/supplier to specify whether disposal requirements apply to contents, container or both.</p> <p>★ Mandatory 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.</p> <p>★ 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.</p>

7.3.2.15 Organic peroxides

Hazard category	Signal word	Hazard statement
Type A	Danger	H240 Heating may cause an explosion



Precautionary Statements			
Prevention	Response	Storage	Disposal
<p>P210</p> <p>Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</p> <p>★ Highly recommended</p> <p>P234</p> <p>Keep only in original packaging.</p> <p>★ Highly recommended where the packaging is important for preventing or suppressing the effect of dangerous reactions or explosion</p> <p>P235</p> <p>Keep cool</p> <p>- may be omitted if P411 is given on the label</p> <p>★ Optional</p>	<p>P370 + P372 + P380 + P373</p> <p>In case of fire: Explosion risk. Evacuate area. DO NOT fight fire when fire reaches explosives</p> <p>★ Highly recommended</p>	<p>P403</p> <p>Store in a well-ventilated place.</p> <p>- except for temperature controlled self-reactive substances and mixtures or organic peroxides because condensation and consequent freezing may take place</p> <p>★ Highly recommended, in combination with P411 or P235</p> <p>P410</p> <p>Protect from sunlight.</p> <p>★ Optional if P411 or P235 has already been assigned</p> <p>P411</p> <p>Store at temperatures not exceeding ...°C/...°F.</p> <p>- if temperature control is required (according to CLP Annex I, section 2.15.2.3) or if otherwise deemed necessary.</p>	<p>P501</p> <p>Dispose of contents/container to ...</p> <p>... in accordance with local/regional/national/international regulations (to be specified).</p> <p>Manufacturer/supplier to specify whether disposal requirements apply to contents, container or both.</p> <p>★ 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.</p>

<p>P240</p> <p>Ground and bond container and receiving equipment</p> <p>- if electrostatically sensitive and able to generate an explosive atmosphere</p> <ul style="list-style-type: none"> ★ Optional unless other conditions deem it necessary ★ Recommended for inclusion in the safety data sheet <p>P280</p> <p>Wear protective gloves/protective clothing/eye protection/face protection.</p> <p>Manufacturer/supplier to specify the appropriate type of equipment.</p> <ul style="list-style-type: none"> ★ Highly recommended 		<p>... Manufacturer/supplier to specify temperature using the applicable temperature scale.</p> <ul style="list-style-type: none"> ★ Highly recommended <p>P420</p> <p>Store separately.</p> <ul style="list-style-type: none"> ★ 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 	
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7.3.2.15 Organic peroxides (continued)

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



Precautionary Statements			
Prevention	Response	Storage	Disposal
<p>P210</p> <p>Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</p> <p>★ Highly recommended</p> <p>P234</p> <p>Keep only in original packaging.</p> <p>★ Highly recommended</p> <p>P235</p> <p>Keep cool</p> <p>- may be omitted if P411 is given on the label</p> <p>★ Optional</p> <p>P240</p> <p>Ground and bond container and receiving equipment</p> <p>- if electrostatically sensitive and able to generate an explosive atmosphere</p>	<p>P370 + P380 + P375 [+ P378]</p> <p>In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion. [Use ... to extinguish].</p> <p>... Manufacturer/supplier to specify appropriate media.</p> <p>- text in square brackets to be used if water increases risk.</p> <p>★ Highly recommended</p>	<p>P403</p> <p>Store in a well-ventilated place.</p> <p>- except for temperature controlled self-reactive substances and mixtures or organic peroxides because condensation and consequent freezing may take place</p> <p>★ Highly recommended, in combination with P411 or P235</p> <p>P410</p> <p>Protect from sunlight.</p> <p>★ Optional if P411 or P235 has already been assigned</p> <p>P411</p> <p>Store at temperatures not exceeding ...°C/...°F.</p> <p>- if temperature control is required (according to CLP Annex I, section 2.15.2.3) or if otherwise deemed necessary.</p>	<p>P501</p> <p>Dispose of contents/container to ...</p> <p>... in accordance with local/regional/national/international regulations (to be specified).</p> <p>Manufacturer/supplier to specify whether disposal requirements apply to contents, container or both.</p> <p>★ Mandatory 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.</p> <p>★ Recommended for inclusion in the safety data sheet if there are specific</p>

<ul style="list-style-type: none"> ★ Optional unless other conditions deem it necessary ★ Recommended for inclusion in the safety data sheet <p>P280</p> <p>Wear protective gloves/protective clothing/eye protection/face protection.</p> <p>Manufacturer/supplier to specify the appropriate type of equipment.</p> <ul style="list-style-type: none"> ★ Highly recommended 		<p>... Manufacturer/supplier to specify temperature using the applicable temperature scale.</p> <ul style="list-style-type: none"> ★ Highly recommended <p>P420</p> <p>Store separately.</p> <ul style="list-style-type: none"> ★ 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 	<p>disposal requirements above the normal expectation for the disposal of chemicals. Specify the applicable regulation.</p>
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7.3.2.15 Organic peroxides (continued)

Hazard category	Signal word	Hazard statement
Type C	Danger	H242 Heating may cause a fire
Type D	Danger	H242 Heating may cause a fire
Type E	Warning	H242 Heating may cause a fire
Type F	Warning	H242 Heating may cause a fire



Precautionary Statements			
Prevention	Response	Storage	Disposal
<p>P210</p> <p>Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</p> <p>★ Highly recommended</p> <p>P234</p> <p>Keep only in original packaging.</p> <p>★ Highly recommended</p> <p>P235</p> <p>Keep cool</p> <p>- may be omitted if P411 is given on the label</p> <p>★ Optional</p>	<p>P370 + P378</p> <p>In case of fire: Use ... to extinguish.</p> <p>- if water increases risk.</p> <p>... Manufacturer/supplier to specify appropriate media.</p> <p>★ Highly recommended if specific extinguishing media are required or appropriate</p>	<p>P403</p> <p>Store in a well-ventilated place.</p> <p>- except for temperature controlled self-reactive substances and mixtures or organic peroxides because condensation and consequent freezing may take place</p> <p>★ Highly recommended, in combination with P411 or P235</p> <p>P410</p> <p>Protect from sunlight.</p> <p>★ Optional if P411 or P235 has already been assigned</p> <p>P411</p> <p>Store at temperatures not exceeding ...°C/...°F.</p> <p>- if temperature control is required (according to CLP Annex I, section 2.15.2.3) or if otherwise deemed necessary.</p>	<p>P501</p> <p>Dispose of contents/container to ...</p> <p>... in accordance with local/regional/national/international regulations (to be specified).</p> <p>Manufacturer/supplier to specify whether disposal requirements apply to contents, container or both.</p> <p>★ Mandatory 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.</p> <p>★ 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.</p>

<p>P240</p> <p>Ground and bond container and receiving equipment</p> <p>- if electrostatically sensitive and able to generate an explosive atmosphere</p> <ul style="list-style-type: none"> ★ Optional unless other conditions deem it necessary ★ Recommended for inclusion in the safety data sheet <p>P280</p> <p>Wear protective gloves/protective clothing/eye protection/face protection.</p> <p>Manufacturer/supplier to specify the appropriate type of equipment.</p> <ul style="list-style-type: none"> ★ Highly recommended 		<p>... Manufacturer/supplier to specify temperature using the applicable temperature scale.</p> <ul style="list-style-type: none"> ★ Highly recommended <p>P420</p> <p>Store separately.</p> <ul style="list-style-type: none"> ★ 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 	
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7.3.2.16 Corrosive to metals

Hazard category	Signal word	Hazard statement
1	Warning	H290 May be corrosive to metals



Precautionary Statements			
Prevention	Response	Storage	Disposal
<p>P234</p> <p>Keep only in original packaging.</p> <ul style="list-style-type: none"> ★ Recommended for the general public ★ Optional for industrial / professional users ★ Recommended for inclusion in the safety data sheet 	<p>P390</p> <p>Absorb spillage to prevent material damage.</p> <ul style="list-style-type: none"> ★ Recommended 	<p>P406</p> <p>Store in a corrosion resistant/... container with a resistant inner liner.</p> <p>- may be omitted if P234 is given on the label</p> <p>... Manufacturer/supplier to specify other compatible materials.</p> <ul style="list-style-type: none"> ★ 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 Statements			
Prevention	Response	Storage	Disposal
<p>P264</p> <p>Wash ... thoroughly after handling.</p> <p>Manufacturer/supplier to specify parts of the body to be washed after handling.</p> <ul style="list-style-type: none"> ★ Highly recommended for the general public ★ Recommended for industrial / professional users <p>P270</p> <p>Do not eat, drink or smoke when using this product.</p>	<p>P301 + P310</p> <p>IF SWALLOWED: Immediately call a POISON CENTER/doctor/...</p> <p>...Manufacturer/supplier to specify the appropriate source of emergency medical advice.</p> <ul style="list-style-type: none"> ★ Highly recommended <p>P321</p> <p>Specific treatment (see ... on this label).</p> <p>- if immediate administration of antidote is required.</p> <p>... Reference to supplemental first aid instruction.</p>	<p>P405</p> <p>Store locked up.</p> <ul style="list-style-type: none"> ★ Highly recommended for the general public ★ Optional for industrial / professional users unless other conditions (Member State legislation) deem it necessary 	<p>P501</p> <p>Dispose of contents/container to ...</p> <p>... in accordance with local/regional/national/international regulations (to be specified).</p> <p>Manufacturer/supplier to specify whether disposal requirements apply to contents, container or both.</p> <ul style="list-style-type: none"> ★ Mandatory 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

<ul style="list-style-type: none"> ★ Highly recommended for the general public for categories 1 and 2 ★ Recommended for the general public for category 3 ★ Optional for industrial / professional users ★ Recommended for inclusion in the safety data sheet 	<ul style="list-style-type: none"> ★ Highly recommended only in exceptional cases where specific treatment is known and required <p>P330 in combination with P301</p> <p>Rinse mouth.</p> <ul style="list-style-type: none"> ★ Highly recommended for the general public for categories 1 and 2 unless P301+P330+P331 is assigned ★ Recommended for the general public for category 3 unless P301+P330+P331 is assigned ★ Recommended for industrial / professional users for categories 1 and 2 unless P301+P330+P331 is assigned ★ Optional for industrial / professional users for category 3 		<p>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.</p>
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7.3.3.1 Acute Toxicity – Oral (continued)

Hazard category	Signal word	Hazard statement
4	Warning	H302 Harmful if swallowed



Precautionary Statements			
Prevention	Response	Storage	Disposal
<p>P264</p> <p>Wash ... thoroughly after handling.</p> <p>Manufacturer/supplier to specify parts of the body to be washed after handling.</p> <p>★ Recommended</p> <p>P270</p> <p>Do not eat, drink or smoke when using this product.</p> <p>★ Recommended for the general public</p> <p>★ Optional for industrial / professional users</p> <p>★ Recommended for inclusion in the safety data sheet</p>	<p>P301 + P312</p> <p>IF SWALLOWED: Call a POISON CENTRE/doctor/...if you feel unwell.</p> <p>...Manufacturer/supplier to specify the appropriate source of emergency medical advice.</p> <p>★ Optional</p> <p>P330</p> <p>Rinse mouth.</p> <p>★ Optional</p>		<p>P501</p> <p>Dispose of contents/container to ...</p> <p>... in accordance with local/regional/national/international regulations (to be specified)</p> <p>Manufacturer/supplier to specify whether disposal requirements apply to contents, container or both.</p> <p>★ Mandatory 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.</p> <p>★ 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.</p>

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
<p>P262</p> <p>Do not get in eyes, on skin, or on clothing.</p> <ul style="list-style-type: none"> ★ Highly recommended <p>P264</p> <p>Wash ... thoroughly after handling.</p> <p>Manufacturer / supplier to specify parts of the body to be washed after handling.</p> <ul style="list-style-type: none"> ★ Highly recommended <p>P270</p> <p>Do not eat, drink or smoke when using this product.</p> <ul style="list-style-type: none"> ★ Highly recommended for the general public ★ Optional for industrial / professional users. ★ Recommended for inclusion in the safety data sheet 	<p>P302 + P352</p> <p>IF ON SKIN: Wash with plenty of water/...</p> <p>...Manufacturer/supplier may specify a cleansing agent if appropriate, or may recommend an alternative agent in exceptional cases if water is clearly inappropriate.</p> <ul style="list-style-type: none"> ★ Recommended for the general public ★ Recommended for inclusion in the safety data sheet <p>P310</p> <p>Immediately call a POISON CENTER/doctor/...</p> <p>...Manufacturer/supplier to specify the appropriate source of emergency medical advice.</p> <ul style="list-style-type: none"> ★ Highly recommended, in combination with P302+P352 	<p>P405</p> <p>Store locked up.</p> <ul style="list-style-type: none"> ★ Highly recommended for the general public ★ Optional for industrial/professional users unless other conditions (Member State legislation) deem it necessary 	<p>P501</p> <p>Dispose of contents/container to ...</p> <p>... in accordance with local/regional/national/international regulations (to be specified).</p> <p>Manufacturer/supplier to specify whether disposal requirements apply to contents, container or both.</p> <ul style="list-style-type: none"> ★ Mandatory 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 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.

<p>P280</p> <p>Wear protective gloves/protective clothing/eye protection/face protection.</p> <p>- Specify protective gloves/clothing.</p> <p>Manufacturer/supplier may further specify type of equipment where appropriate.</p> <p>★ Highly recommended</p>	<p>P321</p> <p>Specific treatment (see ... on this label).</p> <p>- if immediate measures, such as specific cleansing agent, are advised</p> <p>...Reference to supplemental first aid instruction.</p> <p>★ Highly recommended only in exceptional cases where specific treatment is known and required</p> <p>P361 + P364</p> <p>Take off immediately all contaminated clothing and wash it before reuse</p> <p>★ Recommended</p>		
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7.3.3.1 Acute Toxicity – Dermal (continued)

Hazard category	Signal word	Hazard statement
3	Danger	H311 Toxic in contact with skin



Precautionary Statements			
Prevention	Response	Storage	Disposal
<p>P280</p> <p>Wear protective gloves/protective clothing/eye protection/face protection.</p> <p>- Specify protective gloves/clothing.</p> <p>Manufacturer/supplier may further specify type of equipment where appropriate.</p> <p>★ Highly recommended</p>	<p>P302 + P352</p> <p>IF ON SKIN: Wash with plenty of water/...</p> <p>...Manufacturer/supplier may specify a cleansing agent if appropriate, or may recommend an alternative agent in exceptional cases if water is clearly inappropriate.</p> <p>★ Recommended for the general public</p> <p>★ Recommended for inclusion in the safety data sheet</p> <p>P312</p> <p>Call a POISON CENTRE/doctor/...if you feel unwell.</p> <p>...Manufacturer/supplier to specify the appropriate source of emergency medical advice.</p> <p>★ Recommended</p>	<p>P405</p> <p>Store locked up.</p> <p>★ Highly recommended for the general public</p> <p>★ Optional for industrial / professional users unless other conditions (Member State legislation) deem it necessary</p>	<p>P501</p> <p>Dispose of contents/container to ...</p> <p>... in accordance with local/regional/national/international regulations (to be specified).</p> <p>Manufacturer/supplier to specify whether disposal requirements apply to contents, container or both.</p> <p>★ Mandatory 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.</p> <p>★ 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.</p>

	<p>P321</p> <p>Specific treatment (see ... on this label).</p> <p>- if immediate measures, such as specific cleansing agent, are advised</p> <p>...Reference to supplemental first aid instruction.</p> <p>★ Highly recommended only in exceptional cases where specific treatment is known and required</p> <p>P361+P364</p> <p>Take off immediately all contaminated clothing and wash it before reuse.</p> <p>★ Recommended</p>		
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7.3.3.1 Acute Toxicity – Dermal (continued)



Hazard category	Signal word	Hazard statement
4	Warning	H312 Harmful in contact with skin

Precautionary Statements			
Prevention	Response	Storage	Disposal
<p>P280</p> <p>Wear protective gloves/ protective clothing /eye protection/face protection.</p> <p>- Specify protective gloves/clothing.</p> <p>Manufacturer/supplier may further specify type of equipment where appropriate.</p> <p>★ Recommended</p>	<p>P302 + P352</p> <p>IF ON SKIN: Wash with plenty of water/...</p> <p>...Manufacturer/supplier may specify a cleansing agent if appropriate, or may recommend an alternative agent in exceptional cases if water is clearly inappropriate.</p> <p>★ Optional</p> <p>P312</p> <p>Call a POISON CENTRE/doctor/...if you feel unwell.</p> <p>...Manufacturer/supplier to specify the appropriate source of emergency medical advice.</p> <p>★ Recommended</p>		<p>P501</p> <p>Dispose of contents/container to ...</p> <p>... in accordance with local/regional/national/international regulations (to be specified).</p> <p>Manufacturer/supplier to specify whether disposal requirements apply to contents, container or both.</p> <p>★ Mandatory 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.</p> <p>★ 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.</p>

	<p>P321</p> <p>Specific treatment (see ... on this label).</p> <p>- if immediate measures, such as specific cleansing agent, are advised.</p> <p>...Reference to supplemental first aid instruction.</p> <p>★ Highly recommended only in exceptional cases where specific treatment is known and required</p> <p>P362 + P364</p> <p>Take off contaminated clothing and wash it before reuse.</p> <p>★ Optional</p>		
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7.3.3.1 Acute Toxicity - Inhalation

Hazard category	Signal word	Hazard statement
1	Danger	H330 Fatal if inhaled
2	Danger	H330 Fatal if inhaled



Precautionary Statements			
Prevention	Response	Storage	Disposal
<p>P260</p> <p>Do not breathe dust/fume/gas/mist/vapours/spray.</p> <p>Manufacturer/supplier to specify applicable conditions.</p> <ul style="list-style-type: none"> ★ Highly recommended <p>P271</p> <p>Use only outdoors or in a well-ventilated area.</p> <ul style="list-style-type: none"> ★ Highly recommended for the general public ★ Optional for industrial/professional users 	<p>P304 + P340</p> <p>IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing.</p> <ul style="list-style-type: none"> ★ Highly recommended <p>P310</p> <p>Immediately call a POISON CENTER/doctor/...</p> <p>...Manufacturer/supplier to specify the appropriate source of emergency medical advice.</p> <ul style="list-style-type: none"> ★ Highly recommended, in combination with P304+P340 	<p>P403 + P233</p> <p>Store in a well-ventilated place. Keep container tightly closed.</p> <p>- if the substance or mixture is volatile and may generate a hazardous atmosphere.</p> <ul style="list-style-type: none"> ★ Highly recommended unless P404 has already been assigned <p>P405</p> <p>Store locked up.</p> <ul style="list-style-type: none"> ★ Highly recommended for the general public ★ Optional for industrial / professional users unless other conditions (Member State legislation) deem it necessary 	<p>P501</p> <p>Dispose of contents/container to ...</p> <p>... in accordance with local/regional/national/international regulations (to be specified).</p> <p>Manufacturer/supplier to specify whether disposal requirements apply to contents, container or both.</p> <ul style="list-style-type: none"> ★ Mandatory 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.

<p>P284</p> <p>[In case of inadequate ventilation] wear respiratory protection.</p> <p>- text in square brackets may be used if additional information is provided with the chemical at the point of use that explains what type of ventilation would be adequate for safe use.</p> <p>Manufacturer/supplier to specify equipment.</p> <ul style="list-style-type: none"> ★ Recommended for industrial/professional users in exceptional cases where inadequate ventilation/organisational measures cannot sufficiently prevent inhalation ★ Recommended for inclusion in the safety data sheet 	<p>P320</p> <p>Specific treatment is urgent (see ... on this label)</p> <p>- if immediate administration of antidote is required.</p> <p>... Reference to supplemental first aid instruction.</p> <ul style="list-style-type: none"> ★ Highly recommended only in exceptional cases where specific treatment is known and required 		
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7.3.3.1 Acute Toxicity – Inhalation (continued)

Hazard category	Signal word	Hazard statement
3	Danger	H331 Toxic if inhaled



Precautionary Statements			
Prevention	Response	Storage	Disposal
<p>P261</p> <p>Avoid breathing dust/fume/gas/mist/vapours/spray.</p> <p>- may be omitted if P260 is given on the label.</p> <p>Manufacturer/supplier to specify applicable conditions.</p> <p>★ Recommended</p> <p>P271</p> <p>Use only outdoors or in a well-ventilated area.</p> <p>★ Highly recommended for the general public</p> <p>★ Optional for industrial/professional users</p>	<p>P304 + P340</p> <p>IF INHALED: Remove person to fresh air and keep comfortable for breathing.</p> <p>★ Recommended</p> <p>P311</p> <p>Call a POISON CENTER/doctor/...</p> <p>...Manufacturer/supplier to specify the appropriate source of emergency medical advice.</p> <p>★ Recommended, in combination with P304+P340</p> <p>P321</p> <p>Specific treatment (see ... on this label)</p> <p>- if immediate specific measures are required.</p> <p>...Reference to supplemental first aid instruction.</p> <p>★ Highly recommended only in exceptional cases where specific treatment is known and required</p>	<p>P403 + P233</p> <p>Store in a well-ventilated place. Keep container tightly closed.</p> <p>- if the substance or mixture is volatile and may generate a hazardous atmosphere.</p> <p>★ Highly recommended</p> <p>P405</p> <p>Store locked up.</p> <p>★ Highly recommended for the general public</p> <p>★ Optional for industrial / professional users unless other conditions (Member State legislation) deem it necessary</p>	<p>P501</p> <p>Dispose of contents/container to ...</p> <p>... in accordance with local/regional/national/international regulations (to be specified).</p> <p>Manufacturer/supplier to specify whether disposal requirements apply to contents, container or both.</p> <p>★ Mandatory 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.</p> <p>★ 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.</p>

7.3.3.1 Acute Toxicity – Inhalation (continued)

Hazard category	Signal word	Hazard statement
4	Warning	H332 Harmful if inhaled



Precautionary Statements			
Prevention	Response	Storage	Disposal
<p>P261</p> <p>Avoid breathing dust/fume/gas/mist/vapours/spray.</p> <p>- may be omitted if P260 is given on the label.</p> <p>Manufacturer/supplier to specify applicable conditions.</p> <p>★ Recommended</p> <p>P271</p> <p>Use only outdoors or in a well-ventilated area.</p> <p>★ Highly recommended for the general public</p> <p>★ Optional for industrial/professional users</p>	<p>P304 + P340</p> <p>IF INHALED: Remove person to fresh air and keep comfortable for breathing.</p> <p>★ Optional</p> <p>P312</p> <p>Call a POISON CENTRE/doctor/...if you feel unwell.</p> <p>...Manufacturer/supplier to specify the appropriate source of emergency medical advice.</p> <p>★ Recommended</p>		

7.3.3.2 Skin corrosion/irritation

Hazard category	Signal word	Hazard statement
Sub-categories 1A, 1B, 1C and Category 1	Danger	H314 Causes severe skin burns and eye damage



Precautionary Statements			
Prevention	Response	Storage	Disposal
<p>P260</p> <p>Do not breathe dust/fume/gas/mist/vapours/spray.</p> <p>Manufacturer/supplier to specify applicable conditions.</p> <ul style="list-style-type: none"> - specify do not breathe dusts or mists. - If inhalable particles of dusts or mists may occur during use. <p>★ Highly recommended</p>	<p>P301 + P330 + P331</p> <p>IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.</p> <ul style="list-style-type: none"> ★ Highly recommended for the general public, provided that medical advice indicates that the statement is appropriate ★ Recommended for industrial / professional users, provided that medical advice indicates that the statement is appropriate 	<p>P405</p> <p>Store locked up.</p> <ul style="list-style-type: none"> ★ Highly recommended for the general public ★ Optional for industrial / professional users unless other conditions (Member State legislation) deem it necessary 	<p>P501</p> <p>Dispose of contents/container to ...</p> <p>...in accordance with local/regional/national/international regulations (to be specified).</p> <p>Manufacturer/supplier to specify whether disposal requirements apply to contents, container or both.</p> <ul style="list-style-type: none"> ★ Mandatory 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
<p>P264</p> <p>Wash ... thoroughly after handling.</p> <p>Manufacturer/supplier to specify parts of the body to be washed after handling.</p> <ul style="list-style-type: none"> ★ Highly recommended for the general public, unless P280 has already been assigned ★ Highly recommended for industrial / professional users, unless P280 has already been assigned 	<p>P303 + P361 + P353</p> <p>IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].</p> <p>- text in square brackets to be included where the manufacturer/supplier considers it appropriate for the specific chemical.</p> <p>★ Highly recommended</p>		

<p>P280</p> <p>Wear protective gloves/protective clothing/eye protection/face protection.</p> <p>- Specify protective gloves/clothing and eye/face protection.</p> <p>Manufacturer/supplier may further specify type of equipment where appropriate.</p> <ul style="list-style-type: none"> ★ Highly recommended 	<p>P363</p> <p>Wash contaminated clothing before reuse.</p> <ul style="list-style-type: none"> ★ Recommended for the general public ★ Recommended for inclusion in the safety data sheet <p>P304 + P340</p> <p>If INHALED: Remove person to fresh air and keep comfortable for breathing.</p> <ul style="list-style-type: none"> ★ Optional <p>P310</p> <p>Immediately call a POISON CENTER/doctor/...</p> <p>...Manufacturer/supplier to specify the appropriate source of emergency medical advice.</p> <ul style="list-style-type: none"> ★ Highly recommended, in combination with P303+P361+P353, P305+P351+ P338 or P301 + P330 + P331 <p>P321</p> <p>Specific treatment (see ... on this label).</p> <p>...Reference to supplemental first aid instruction.</p> <p>Manufacturer/supplier may specify a cleansing agent if appropriate.</p>		<p>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.</p>
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	<p>★ Highly recommended only in exceptional cases where specific treatment is known and required</p> <p>P305 + P351 + P338</p> <p>IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>★ Highly recommended</p>		
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7.3.3.2 Skin corrosion/irritation (continued)

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



Precautionary Statements			
Prevention	Response	Storage	Disposal
<p>P264</p> <p>Wash ... thoroughly after handling.</p> <p>... Manufacturer/supplier to specify parts of the body to be washed after handling.</p> <p>★ Recommended</p>	<p>P302 + P352</p> <p>IF ON SKIN: Wash with plenty of water/...</p> <p>...Manufacturer/supplier may specify a cleansing agent if appropriate, or may recommend an alternative agent in exceptional cases if water is clearly inappropriate.</p> <p>★ Optional for the general public</p> <p>★ Recommended for inclusion in the safety data sheet</p>		
<p>P280</p> <p>Wear protective gloves/protective clothing/eye protection/face protection.</p> <p>- Specify protective gloves.</p> <p>Manufacturer/supplier may further specify type of equipment where appropriate.</p> <p>★ Recommended</p>	<p>P321</p> <p>Specific treatment (see ... on this label).</p> <p>...Reference to supplemental first aid instruction.</p> <p>Manufacturer/supplier may specify a cleansing agent if appropriate.</p> <p>★ Recommended only in exceptional cases where specific treatment is known and required</p>		

	<p>P332 + P313</p> <p>If skin irritation occurs: Get medical advice/attention.</p> <p>- may be omitted when P333 + P313 is given on the label.</p> <p>★ Optional</p> <p>P362 + P364</p> <p>Take off contaminated clothing and wash it before reuse.</p> <p>★ Optional</p> <p>★ Recommended for inclusion in the safety data sheet</p>		
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7.3.3.3 Serious eye damage - only⁵¹



Hazard category	Signal word	Hazard statement
1	Danger	H318 Causes serious eye damage

Precautionary Statements			
Prevention	Response	Storage	Disposal
<p>P280</p> <p>Wear protective gloves/protective clothing/eye protection/face protection.</p> <p>- Specify eye/face protection.</p> <p>Manufacturer/supplier may further specify type of equipment where appropriate.</p> <p>★ Highly recommended</p>	<p>P305 + P351 + P338</p> <p>IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>★ Highly recommended</p> <p>P310</p> <p>Immediately call a POISON CENTER/doctor/...</p> <p>...Manufacturer/supplier to specify the appropriate source of emergency medical advice.</p> <p>★ Highly recommended, in combination with P305+P351+P338</p>		

⁵¹ Where a chemical is classified as skin corrosion Sub-Category 1A, 1B, 1C or Category 1, labelling for serious eye damage/eye irritation can be omitted as this information is already included in the hazard statement for skin corrosion Category 1 (H314).

7.3.3.3 Eye irritation – only⁵²



Hazard category	Signal word	Hazard statement
2	Warning	H319 Causes serious eye irritation

Precautionary Statements			
Prevention	Response	Storage	Disposal
<p>P264</p> <p>Wash ... thoroughly after handling.</p> <p>... Manufacturer/supplier to specify parts of the body to be washed after handling.</p> <ul style="list-style-type: none"> ★ Optional for the industrial/ professional users ★ Recommended for the general public <p>P280</p> <p>Wear protective gloves/protective clothing/eye protection/face protection.</p> <p>- Specify eye/face protection.</p> <p>Manufacturer/supplier may further specify type of equipment where appropriate.</p> <ul style="list-style-type: none"> ★ Recommended 	<p>P305 + P351 + P338</p> <p>IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <ul style="list-style-type: none"> ★ Recommended for the general public ★ Recommended for inclusion in the safety data sheet <p>P337 + P313</p> <p>If eye irritation persists: Get medical advice/attention.</p> <ul style="list-style-type: none"> ★ Recommended 		

⁵² Where a chemical is classified as skin corrosion Sub-Category 1A, 1B, 1C or Category 1, labelling for serious eye damage/eye irritation can be omitted as this information is already included in the hazard statement for skin corrosion Category 1 (H314).

7.3.3.4 Respiratory sensitisation

Hazard category	Signal word	Hazard statement
1, 1A, 1B	Danger	H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled



Precautionary Statements			
Prevention	Response	Storage	Disposal
<p>P261</p> <p>Avoid breathing dust/fume/gas/mist/vapours/spray.</p> <ul style="list-style-type: none"> - may be omitted if P260 is given on the label. <p>Manufacturer/supplier to specify applicable conditions.</p> <ul style="list-style-type: none"> ★ Highly recommended <p>P284</p> <p>[In case of inadequate ventilation] wear respiratory protection.</p> <ul style="list-style-type: none"> - text in square brackets may be used if additional information is provided with the chemical at the point of use that explains what type of ventilation would be adequate for safe use. <p>Manufacturer/supplier to specify equipment.</p> <ul style="list-style-type: none"> ★ Recommended for industrial/professional users in exceptional cases where inadequate ventilation/organisational measures cannot sufficiently prevent inhalation ★ Recommended for inclusion in the safety data sheet 	<p>P304 + P340</p> <p>IF INHALED: Remove person to fresh air and keep comfortable for breathing.</p> <ul style="list-style-type: none"> ★ Highly recommended <p>P342 + P311</p> <p>If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.</p> <ul style="list-style-type: none"> ★ Highly recommended 		<p>P501</p> <p>Dispose of contents/container to ...</p> <p>... in accordance with local/regional/national/international regulations (to be specified).</p> <p>Manufacturer/supplier to specify whether disposal requirements apply to contents, container or both.</p> <ul style="list-style-type: none"> ★ Mandatory 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.

7.3.3.4 Skin sensitisation

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



Precautionary Statements			
Prevention	Response	Storage	Disposal
<p>P261</p> <p>Avoid breathing dust/fume/gas/mist/vapours/spray.</p> <ul style="list-style-type: none"> - may be omitted if P260 is given on the label. <p>Manufacturer/supplier to specify applicable conditions.</p> <ul style="list-style-type: none"> ★ Recommended <p>P272</p> <p>Contaminated work clothing should not be allowed out of the workplace.</p> <ul style="list-style-type: none"> ★ Not intended to be used for the general public ★ Optional for industrial/professional users 	<p>P302 + P352</p> <p>IF ON SKIN: Wash with plenty of water/...</p> <p>...Manufacturer/supplier may specify a cleansing agent if appropriate, or may recommend an alternative agent in exceptional cases if water is clearly inappropriate.</p> <ul style="list-style-type: none"> ★ Recommended for the general public ★ Recommended for inclusion in the safety data sheet <p>P333 + P313</p> <p>If skin irritation or rash occurs: Get medical advice/attention.</p> <ul style="list-style-type: none"> ★ Recommended 		<p>P501</p> <p>Dispose of contents/container to ...</p> <p>... in accordance with local/regional/national/international regulations (to be specified).</p> <p>Manufacturer/supplier to specify whether disposal requirements apply to contents, container or both.</p> <ul style="list-style-type: none"> ★ Mandatory 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.

<p>P280</p> <p>Wear protective gloves/protective clothing/eye protection/face protection.</p> <ul style="list-style-type: none"> - Specify protective gloves. <p>Manufacturer/supplier may further specify type of equipment where appropriate.</p> <ul style="list-style-type: none"> ★ Highly recommended 	<p>P321</p> <p>Specific treatment (see ... on this label)</p> <p>... Reference to supplemental first aid instruction.</p> <p>Manufacturer/supplier may specify a cleansing agent if appropriate.</p> <ul style="list-style-type: none"> ★ Highly recommended only in exceptional cases where specific treatment is known and required <p>P362+P364</p> <p>Take off contaminated clothing and wash it before reuse.</p> <ul style="list-style-type: none"> ★ Recommended 		
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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)



Precautionary Statements			
Prevention	Response	Storage	Disposal
<p>P201</p> <p>Obtain special instructions before use.</p> <ul style="list-style-type: none"> ★ Highly recommended for category 1A and 1B ★ Recommended for category 2 <p>P202</p> <p>Do not handle until all safety precautions have been read and understood.</p> <ul style="list-style-type: none"> ★ Optional where P201 is assigned 	<p>P308 + P313</p> <p>IF exposed or concerned: Get medical advice/attention.</p> <ul style="list-style-type: none"> ★ Highly recommended for category 1A and 1B ★ Recommended for category 2 	<p>P405</p> <p>Store locked up.</p> <ul style="list-style-type: none"> ★ Highly recommended for the general public⁵³ ★ Optional for industrial/professional users unless other conditions (Member State legislation) deem it necessary 	<p>P501</p> <p>Dispose of contents/container to ...</p> <p>... in accordance with local/regional/national/international regulations (to be specified).</p> <p>Manufacturer/supplier to specify whether disposal requirements apply to contents, container or both.</p> <ul style="list-style-type: none"> ★ Mandatory 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.

⁵³ 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). The list of subsequent amendments of Annex XVII is accessible at <http://echa.europa.eu/web/quest/regulations/reach/legislation>.

<p>P280</p> <p>Wear protective gloves/protective clothing/eye protection/face protection.</p> <p>Manufacturer/supplier to specify the appropriate type of equipment.</p> <p>★ Highly recommended</p>			<p>★ 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.</p>
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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
<p>P201</p> <p>Obtain special instructions before use.</p> <ul style="list-style-type: none"> ★ Highly recommended for category 1A and 1B ★ Recommended for category 2 <p>P202</p> <p>Do not handle until all safety precautions have been read and understood.</p> <ul style="list-style-type: none"> ★ Optional where P201 is assigned 	<p>P308 + P313</p> <p>IF exposed or concerned: Get medical advice/attention.</p> <ul style="list-style-type: none"> ★ Highly recommended for category 1A and 1B ★ Recommended for category 2 	<p>P405</p> <p>Store locked up.</p> <ul style="list-style-type: none"> ★ Highly recommended for the general public⁵⁴ ★ Optional for industrial/professional users unless other conditions (Member State legislation) deem it necessary 	<p>P501</p> <p>Dispose of contents/container to ...</p> <p>... in accordance with local/regional/national/international regulations (to be specified).</p> <p>Manufacturer/supplier to specify whether disposal requirements apply to contents, container or both.</p> <ul style="list-style-type: none"> ★ Mandatory 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.

⁵⁴ 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). The list of subsequent amendments of Annex XVII is accessible at: <http://echa.europa.eu/web/guest/regulations/reach/legislation>.

<p>P280</p> <p>Wear protective gloves/protective clothing/eye protection/face protection.</p> <p>Manufacturer/supplier to specify the appropriate type of equipment.</p> <p>★ Highly recommended</p>			<p>★ 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.</p>
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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)



Precautionary Statements			
Prevention	Response	Storage	Disposal
<p>P201</p> <p>Obtain special instructions before use.</p> <ul style="list-style-type: none"> ★ Highly recommended for category 1A and 1B ★ Recommended for category 2 <p>P202</p> <p>Do not handle until all safety precautions have been read and understood.</p> <ul style="list-style-type: none"> ★ Optional where P201 is assigned 	<p>P308 + P313</p> <p>IF exposed or concerned: Get medical advice/attention.</p> <ul style="list-style-type: none"> ★ Highly recommended for category 1A and 1B ★ Recommended for category 2 	<p>P405</p> <p>Store locked up.</p> <ul style="list-style-type: none"> ★ Highly recommended for the general public⁵⁵ ★ Optional for industrial / professional users unless other conditions (Member State legislation) deem it necessary 	<p>P501</p> <p>Dispose of contents/container to ...</p> <p>... in accordance with local/regional/national/international regulations (to be specified).</p> <p>Manufacturer/supplier to specify whether disposal requirements apply to contents, container or both.</p> <ul style="list-style-type: none"> ★ Mandatory 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.

⁵⁵ 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). The list of subsequent amendments of Annex XVII is accessible at ECHA website: <http://echa.europa.eu/web/guest/regulations/reach/legislation>).

<p>P280</p> <p>Wear protective gloves/protective clothing/eye protection/face protection.</p> <p>Manufacturer/supplier to specify the appropriate type of equipment.</p> <p>★ Highly recommended</p>			<p>★ 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.</p>
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7.3.3.7 Reproductive toxicity (continued)

No hazard pictogram

Hazard category	Signal word	Hazard statement
Additional category for effects on or via lactation	<i>No signal word</i>	H362 May cause harm to breast-fed children

Precautionary Statements			
Prevention	Response	Storage	Disposal
<p>P201</p> <p>Obtain special instructions before use.</p> <p>★ Highly recommended</p>	<p>P308 + P313</p> <p>IF exposed or concerned: Get medical advice/attention.</p> <p>★ Recommended</p>		
<p>P260</p> <p>Do not breathe dust/fume/gas/mist/vapours/spray.</p> <p>Manufacturer/supplier to specify applicable conditions.</p> <ul style="list-style-type: none"> - Specify do not breathe dusts or mists. - if inhalable particles of dusts or mists may occur during use. <p>★ Highly recommended</p>			
<p>P263</p> <p>Avoid contact during pregnancy and while nursing.</p> <p>★ Highly recommended</p>			

<p>P264</p> <p>Wash ... thoroughly after handling.</p> <p>... Manufacturer / supplier to specify parts of the body to be washed after handling.</p> <ul style="list-style-type: none">★ Optional <p>P270</p> <p>Do not eat, drink or smoke when using this product.</p> <ul style="list-style-type: none">★ Recommended for the general public★ Optional for industrial / professional users★ Recommended for inclusion in the safety data sheet			
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7.3.3.8 Specific target organ toxicity after single exposure

Hazard category	Signal word	Hazard statement
1	Danger	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
<p>P260</p> <p>Do not breathe dust/fume/gas/mist/vapours/spray.</p> <p>Manufacturer/supplier to specify applicable conditions.</p> <ul style="list-style-type: none"> ★ Highly recommended where the substance / mixture is volatile or a gas or where exposure via inhalation is possible, e.g. through spraying or inhalable dust or in case H370 indicates inhalation as a route of exposure <p>P264</p> <p>Wash ... thoroughly after handling.</p> <p>... Manufacturer / supplier to specify parts of the body to be washed after handling.</p> <ul style="list-style-type: none"> ★ Optional 	<p>P308 + P311</p> <p>IF exposed or concerned: Call a POISON CENTER/doctor...</p> <p>Manufacturer/supplier to specify the appropriate source of emergency medical advice.</p> <ul style="list-style-type: none"> ★ Highly recommended <p>P321</p> <p>Specific treatment (see ... on this label)</p> <p>- if immediate measures are required.</p> <p>... Reference to supplemental first aid instruction.</p> <ul style="list-style-type: none"> ★ Highly recommended only in exceptional cases where specific treatment is known and required 	<p>P405</p> <p>Store locked up.</p> <ul style="list-style-type: none"> ★ Highly recommended for the general public ★ Optional for industrial / professional users unless other conditions (Member State legislation) deem it necessary 	<p>P501</p> <p>Dispose of contents/container to ...</p> <p>... in accordance with local/regional/national/international regulations (to be specified).</p> <p>Manufacturer/supplier to specify whether disposal requirements apply to contents, container or both.</p> <ul style="list-style-type: none"> ★ Mandatory 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.

<p>P270</p> <p>Do not eat, drink or smoke when using this product.</p> <ul style="list-style-type: none">★ Recommended for the general public★ Optional for industrial / professional users★ Recommended for inclusion in the safety data sheet			
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7.3.3.8 Specific target organ toxicity after single exposure (continued)

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
<p>P260</p> <p>Do not breathe dust/fume/gas/mist/vapours/spray.</p> <p>Manufacturer/supplier to specify applicable conditions.</p> <ul style="list-style-type: none"> ★ Highly recommended where the substance / mixture is volatile or a gas or where exposure via inhalation is possible, e.g. through spraying or inhalable dust or in case H371 indicates inhalation as a route of exposure <p>P264</p> <p>Wash ... thoroughly after handling.</p> <p>... Manufacturer / supplier to specify parts of the body to be washed after handling.</p> <ul style="list-style-type: none"> ★ Optional 	<p>P308 + P311</p> <p>IF exposed or concerned: Call a POISON CENTER/ doctor/...</p> <p>Manufacturer/supplier to specify the appropriate source of emergency medical advice</p> <ul style="list-style-type: none"> ★ Recommended 	<p>P405</p> <p>Store locked up.</p> <ul style="list-style-type: none"> ★ Highly recommended for the general public ★ Optional for industrial / professional users unless other conditions (Member State legislation) deem it necessary 	<p>P501</p> <p>Dispose of contents/container to ...</p> <p>... in accordance with local/regional/national/international regulations (to be specified).</p> <p>Manufacturer/supplier to specify whether disposal requirements apply to contents, container or both.</p> <ul style="list-style-type: none"> ★ Mandatory 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.

<p>P270</p> <p>Do not eat, drink or smoke when using this product.</p> <ul style="list-style-type: none">★ Recommended for the general public★ Optional for industrial / professional users★ Recommended for inclusion in the safety data sheet			
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7.3.3.8 Specific target organ toxicity after single exposure (continued)

Hazard category	Signal word	Hazard statement
3	Warning	H335 May cause respiratory irritation; or H336 May cause drowsiness or dizziness



Precautionary Statements			
Prevention	Response	Storage	Disposal
<p>P261</p> <p>Avoid breathing dust/fume/gas/mist/vapours/spray.</p> <p>- may be omitted if P260 is given on the label.</p> <p>Manufacturer/supplier to specify applicable conditions.</p> <p>★ Recommended</p> <p>P271</p> <p>Use only outdoors or in a well-ventilated area.</p> <p>★ Highly recommended for the general public</p> <p>★ Optional for industrial / professional users</p>	<p>P304 + P340</p> <p>IF INHALED: Remove person to fresh air and keep comfortable for breathing.</p> <p>★ Optional</p> <p>P312</p> <p>Call a POISON CENTRE/doctor/...if you feel unwell.</p> <p>...Manufacturer/supplier to specify the appropriate source of emergency medical advice.</p> <p>★ Recommended</p>	<p>P403 + P233</p> <p>Store in a well-ventilated place. Keep container tightly closed.</p> <p>- if the substance or mixture is volatile and may generate a hazardous atmosphere.</p> <p>★ Recommended unless P404 is assigned</p> <p>P405</p> <p>Store locked up.</p> <p>★ Highly recommended for the general public</p> <p>★ Optional for industrial / professional users unless other conditions (Member State legislation) deem it necessary</p>	<p>P501</p> <p>Dispose of contents/container to ...</p> <p>... in accordance with local/regional/national/international regulations (to be specified).</p> <p>Manufacturer/supplier to specify whether disposal requirements apply to contents, container or both.</p> <p>★ Mandatory 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.</p> <p>★ 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.</p>

7.3.3.9 Specific target organ toxicity after 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
<p>P260</p> <p>Do not breathe dust/fume/gas/mist/vapours/spray.</p> <p>Manufacturer/supplier to specify applicable conditions.</p> <ul style="list-style-type: none"> ★ Highly recommended where the substance / mixture is volatile or a gas or where exposure via inhalation is possible, e.g. through spraying or inhalable dust or in case H372 indicates inhalation as a route of exposure <p>P264</p> <p>Wash ... thoroughly after handling.</p> <p>... Manufacturer / supplier to specify parts of the body to be washed after handling.</p> <ul style="list-style-type: none"> ★ Optional 	<p>P314</p> <p>Get medical advice/attention if you feel unwell.</p> <ul style="list-style-type: none"> ★ Recommended 		<p>P501</p> <p>Dispose of contents/container to ...</p> <p>... in accordance with local/regional/national/international regulations (to be specified).</p> <p>Manufacturer/supplier to specify whether disposal requirements apply to contents, container or both.</p> <ul style="list-style-type: none"> ★ Mandatory 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.

<p>P270</p> <p>Do not eat, drink or smoke when using this product.</p> <ul style="list-style-type: none">★ Recommended for the general public★ Optional for industrial / professional users★ Recommended for inclusion in the safety data sheet			
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7.3.3.9 Specific target organ toxicity after repeated exposure (continued)

Hazard category	Signal word	Hazard statement
2	Warning	H373 May cause damage to organs (state all organs affected, if known) through prolonged or repeated exposure (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)



Precautionary Statements			
Prevention	Response	Storage	Disposal
<p>P260</p> <p>Do not breathe dust/fume/gas/mist/vapours/spray.</p> <p>Manufacturer/supplier to specify applicable conditions.</p> <p>★ 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 or in case H373 indicates inhalation as a route of exposure</p>	<p>P314</p> <p>Get medical advice/attention if you feel unwell.</p> <p>★ Recommended</p>		<p>P501</p> <p>Dispose of contents/container to ...</p> <p>... in accordance with local/regional/national/international regulations (to be specified).</p> <p>Manufacturer/supplier to specify whether disposal requirements apply to contents, container or both.</p> <p>★ Mandatory 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.</p> <p>★ 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.</p>

7.3.3.10 Aspiration hazard

Hazard category	Signal word	Hazard statement
1	Danger	H304 May be fatal if swallowed and enters airways



Precautionary Statements			
Prevention	Response	Storage	Disposal
	<p>P301 + P310</p> <p>IF SWALLOWED: Immediately call a POISON CENTER/ doctor/...</p> <p>...Manufacturer/supplier to specify the appropriate source of emergency medical advice.</p> <ul style="list-style-type: none"> ★ Highly recommended, in combination with P331 <p>P331</p> <p>Do NOT induce vomiting.</p> <ul style="list-style-type: none"> ★ Highly recommended, in combination with P301 +P310 	<p>P405</p> <p>Store locked up.</p> <ul style="list-style-type: none"> ★ Highly recommended for the general public ★ Optional for industrial / professional users unless other conditions (Member State legislation) deem it necessary 	<p>P501</p> <p>Dispose of contents/container to ...</p> <p>... in accordance with local/regional/ national/international regulations (to be specified).</p> <p>Manufacturer/supplier to specify whether disposal requirements apply to contents, container or both.</p> <ul style="list-style-type: none"> ★ Mandatory 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 Specific precautionary statements for environmental hazards

7.3.4.1 Hazardous to the aquatic environment – short-term (acute) aquatic hazard

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



Precautionary Statements			
Prevention	Response	Storage	Disposal
<p>P273</p> <p>Avoid release to the environment.</p> <p>- if this is not the intended use.</p> <p>★ Highly recommended</p>	<p>P391</p> <p>Collect spillage.</p> <p>★ Highly recommended</p>		<p>P501</p> <p>Dispose of contents/container to ...</p> <p>... in accordance with local/regional/national/international regulations (to be specified).</p> <p>Manufacturer/supplier to specify whether disposal requirements apply to contents, container or both.</p> <p>★ Mandatory 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.</p> <p>★ 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.</p>

7.3.4.1 Hazardous to the aquatic environment – long-term (chronic) aquatic 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
<p>P273</p> <p>Avoid release to the environment.</p> <ul style="list-style-type: none"> - if this is not the intended use. ★ Highly recommended 	<p>P391</p> <p>Collect spillage.</p> <ul style="list-style-type: none"> ★ Highly recommended 		<p>P501</p> <p>Dispose of contents/container to ...</p> <p>... in accordance with local/regional/national/international regulations (to be specified).</p> <p>Manufacturer/supplier to specify whether disposal requirements apply to contents, container or both.</p> <ul style="list-style-type: none"> ★ Mandatory 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 – long-term (chronic) aquatic hazard (continued)

No hazard pictogram is used

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

Precautionary Statements			
Prevention	Response	Storage	Disposal
<p>P273</p> <p>Avoid release to the environment.</p> <ul style="list-style-type: none"> - if this is not the intended use. ★ Recommended 			<p>P501</p> <p>Dispose of contents/container to ...</p> <p>... in accordance with local/regional/national/international regulations (to be specified).</p> <p>Manufacturer/supplier to specify whether disposal requirements apply to contents, container or both.</p> <ul style="list-style-type: none"> ★ Mandatory 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 the ozone layer



Hazard category	Signal word	Hazard statement
1	Warning	H420 Harms public health and the environment by destroying ozone in the upper atmosphere

Precautionary Statements			
Prevention	Response	Storage	Disposal
			P502 Refer to manufacturer or supplier for information on recovery or recycling ★ Mandatory for the general public ★ Highly recommended for industrial / professional users

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

This section provides practical examples on how to select precautionary statements for various model substances. The set of precautionary statements to be prioritised for the label is highlighted in **bold underlined (highly recommended)** and underlined (recommended), while the optional statements appear in normal letters (no highlighting) and the statements not to be used/unless condition applies/ inclusion on safety data sheet only are marked 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.

Example A. Substance X assigned a physical and various health hazard classifications

A. Classification and hazard statements:

Flam. Liq. 2	H225 Highly flammable liquid and vapour
Acute Tox. 3 (oral)	H301 Toxic if swallowed
Acute Tox. 3 (dermal)	H311 Toxic in contact with skin
Acute Tox. 3 (inhalation)	H331 Toxic if inhaled
STOT-SE 1	H370 Causes damage to liver through dermal exposure

B. Further information:

Substance X is presumed to be volatile, but not so as to generate a potentially explosive atmosphere.

There is possible exposure via inhalation.

Specific extinguishing media are not necessary. Specific treatment/measures is/are not urgently required.

No specific disposal precautionary statements are required since the substance is not intended to be used by the general public, but only by industrial/professional users.

C. Precautionary statements on the basis of the classification (see Annexes I and IV to CLP) and according to this guidance document:

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

Acute Tox. 3 (Oral)	Acute Tox. 3 (Dermal)	Acute Tox. 3 (Inhalation)	STOT-SE 1	Flam. Liq. 2
<u>P301 + P310</u>	P312	<u>P304 + P340</u>	<u>P308 + P311</u>	P303 + P361 + P353
P321	P321	<u>P311</u>	P321	P370 + P378
P330	P361 + P364 P363 P302 + P352	P321		
P405	P405	<u>P403 + P233</u> P405	P405	P403 + P235
P501	P501	P501	P501	P501

Explanation on use of bolding, underline and grey marker:

PXXX = highly recommended; PXXX = recommended; PXXX = optional; PXXX = not to be used/unless condition applies/inclusion on safety data sheet only

D. Selection of highly recommended and recommended precautionary statements:

When the same statement is assigned to different hazards, but with a different priority, the most conservative approach is taken. Where appropriate, precautionary statements are combined into a single combination statement. Duplication of individual phrases is avoided. The selection results in the following set of P-statements:

P210 **Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.**

P260 **Do not breathe dust/fume/gas/mist/vapours/spray.**

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

P301+P310 **IF SWALLOWED: Immediately call a POISON CENTER/doctor/...**

P308+P311 **IF exposed or concerned: Call a POISON CENTER/doctor/...**
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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

E. Result:

Selection in line with the guidance results in seven precautionary statements. A substantial reduction is achieved compared to the starting set of potentially applicable statements for the hazard label, assignable on the basis of the underlying hazards. For example: P261 can be omitted, as P260 is already assigned for the label.

The selected precautionary statements must be placed on the CLP hazard label. As an SDS needs to be prepared, the statements would also have to be included in the SDS, under heading 2.2 "Label elements" (see the [Guidance on the compilation of safety data sheets](#)). The de-selected statements can be introduced under the relevant headings of the SDS to provide the industrial or professional user with sufficient information to handle the substance safely.

Example B. Substance Y assigned a severe physical and health hazard classification

A. Classification and hazard statements:

Ox. Sol. 1 H271 May cause fire or explosion; strong oxidiser
Skin Corr. 1A H314 Causes severe skin burns and eye damage

B. Further information:

Substance Y is a granular solid and is presumed to be non-volatile. Dust exposure during handling and use is possible.

Specific extinguishing media are not necessary.

Specific treatment/measures is/are not urgently required. No specific disposal precautionary statements are required since the substance is not intended to be used by the general public, but only by industrial/professional users.

C. Precautionary statements on the basis of the classification (see Annexes I and IV to CLP) and according to this guidance document:

Ox. Sol. 1	Skin Corr. 1A
<u>P210</u>	<u>P260</u>
<u>P220</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

D. Selection of highly recommended and recommended precautionary statements:

When the same statement is assigned to different hazards, but with a different priority, the most conservative approach is taken (i.e. the highest priority must be taken into account). Where appropriate, precautionary statements are combined into a single combination statement. Duplication of individual phrases is avoided. The selection results in the following set of P-statements:

<u>P210</u>	<u>Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</u>
<u>P220</u>	<u>Keep away from clothing and other combustible materials</u>
<u>P260</u>	<u>Do not breathe dust/fume/gas/mist/vapours/spray.</u>
<u>P280</u>	<u>Wear protective gloves/protective clothing/eye protection/ face protection.</u>
<u>P301+P330+P331</u>	<u>IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.</u>
<u>P303+P361+P353+310</u>	<u>IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. Immediately call a POISON CENTER/doctor/...</u>
<u>P305+P351+P338</u>	<u>IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</u>
<u>P371+P380+P375</u>	<u>In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.</u>

E. Result:

Selection in line with this guidance document results in eight, mostly combined, precautionary statements. A substantial reduction is achieved compared to the starting set of potentially applicable statements for the CLP hazard label, assignable on the basis of the underlying hazards.

The selected precautionary statements must be placed on the CLP hazard label. As an SDS needs to be prepared, they would also have to be included in the SDS, under heading 2.2 "Label elements" (see the [Guidance on the compilation of safety data sheets](#)).

The de-selected statements can be introduced under the relevant headings of the SDS to provide the industrial or professional user with sufficient information to handle the substance safely.

Example C. Substance Z assigned physical, health and environmental classifications

A. Classification and hazard statements:

Pyr. Liq. 1	H250 Catches fire spontaneously if exposed to air
Water-react. 1	H260 In contact with water releases flammable gases which may ignite spontaneously
Skin Corr. 1B	H314 Causes severe skin burns and eye damage
Aquatic Acute 1	H400 Very toxic to aquatic life
Aquatic Chronic 1	H410 Very toxic to aquatic life with long lasting effects

B. Further information:

Substance Z should be regarded as volatile. Therefore, there is a possible exposure via inhalation. Specific extinguishing media are necessary, because water will increase the risk when used for the extinguishing of fire.

As the disposal of the packaging presents a hazard to human health or the environment, specific disposal precautionary statements are required (although the substance is not intended to be used by the general public, but only by industrial/professional users). The hazard statement H400 is omitted from the label to avoid duplication with H411.

C. Precautionary statements on the basis of the classification (see Annexes I and IV to CLP) and according to this guidance document:

Pyr. Liq.1	Water-react. 1	Skin Corr. 1B	Aquatic Acute 1	Aquatic Chronic 1
<u>P210</u> P222 P233 <u>P280</u> <u>P231+P232</u>	P223 <u>P231+P232</u> <u>P280</u>	<u>P260</u> P264 <u>P280</u>	<u>P273</u>	<u>P273</u>
<u>P302+P334</u> <u>P370+P378</u>	<u>P302+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>
-	P402+P404 P501	P405 <u>P501</u>	- <u>P501</u>	- <u>P501</u>

D. Selection of highly recommended and recommended precautionary statements:

When the same statement is assigned to different hazards, but with a different priority, the most conservative approach is taken (i.e. the highest priority must be taken into account). Where appropriate, precautionary statements are combined into a single combination statement. Duplication of individual phrases is avoided.

P303+ P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

and

P302+P335+P334+P310 IF ON SKIN: Brush off loose particles from skin. Immerse in cool water⁵⁶. Immediately call a POISON CENTER/doctor/...)

were merged into one single combination phrase:

P303+ P335+P334+P310+P361 where duplication of the message was avoided.

The selection results in the following set of P-statements:

<u>P210</u>	<u>Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</u>
<u>P260</u>	<u>Do not breathe dust/fume/gas/mist/vapours/spray.</u>
<u>P273</u>	<u>Avoid release to the environment.</u>
<u>P280</u>	<u>Wear protective gloves/protective clothing/eye protection/face protection.</u>
<u>P231+P232</u>	<u>Handle and store under inert gas. Protect from moisture.</u>
<u>P301+P330+P331</u>	<u>IF SWALLOWED: rinse mouth. Do NOT induce vomiting.</u>
<u>P303+ P335+P334+P310+P361</u>	<u>IF ON SKIN (or hair): Brush off loose particles from skin. Immerse in cool water⁵⁷. Immediately call a POISON CENTER/doctor/... Take off immediately all contaminated clothing.</u>
<u>P305+P351+P338</u>	<u>IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</u>
<u>P370+P378</u>	<u>In case of fire: Use ... to extinguish.</u>

E. Result:

Selection in line with this guidance document results in nine, partly combined, precautionary statements.

A substantial reduction is achieved compared to the starting set of potentially applicable statements for the CLP hazard label, assignable on the basis of the underlying hazards. For example, P264 has not been selected, because P280 is more relevant.

To further reduce the number of the P-statements and the amount of digestible information on the label, the statements P391 and P501 have been put in the SDS, as the prevention and response statements for the physical and health hazards appear to contain the more urgent advice for the label.

⁵⁶ The sub-phrase of P334 "or wrap in wet bandages" is not to be used for water-reactive substances and mixtures category 1 (Table 7.3.2.12 in [section 7.3](#) of this guidance document).

⁵⁷ The sub-phrase of P334 "or wrap in wet bandages" is not to be used for water-reactive substances and mixtures category 1 (Table 7.3.2.12 in [section 7.3](#) of this guidance document).

The selected precautionary statements must be placed on the CLP hazard label. As an SDS needs to be prepared, they would also have to be included in the SDS, under heading 2.2 "Label elements" (see the [Guidance on the compilation of safety data sheets](#)). The de-selected statements can be introduced under the relevant headings of the SDS to provide the industrial or professional user with sufficient information to handle the substance safely.

Example D. Mixture ABC for use by the general public

A. Classification and hazard statements:

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

B. Further information:

Mixture ABC is presumed to be volatile, but not so as to generate a potentially explosive atmosphere. Specific extinguishing media are not necessary. Specific treatment is not urgently required.

There are no specific disposal requirements. The mixture is intended to be used by the general public.

C. Precautionary statements on the basis of the classification (see Annexes I and IV to CLP) and according to this guidance document:

Flam. Liq. 2	Acute Tox. 4 (Oral)	Skin Irrit. 2
	<u>P101, 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 P370 + P378	P301+P312 P330	P302+P352 P321 P332+P313 P362+P364
P403 + P235	-	-
P501	P501	-

D. Selection of highly recommended and recommended precautionary statements:

When the same statement is assigned to different hazards, but with a different priority, the most conservative approach is taken. Where appropriate, precautionary statements are combined into a single combination statement. Duplication of individual phrases is avoided. The selection results in the following set of P-statements:

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

P102 Keep out of reach of children.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P233 Keep container tightly closed.

P264 Wash ... thoroughly after handling.

P280 Wear protective gloves.

P501 Dispose of contents/container to ...

E. Result:

Selection in line with this guidance document results in seven precautionary statements. A substantial reduction is achieved compared to the starting set of potentially applicable statements for the CLP hazard label, assignable on the basis of the underlying hazards.

The selected precautionary statements must be placed on the CLP hazard label. As an SDS needs to be prepared, they would also have to be included in the SDS, under heading 2.2 "Label elements" (see the [Guidance on the compilation of safety data sheets](#)).

The de-selected statements can be introduced under the relevant headings of the SDS to provide the industrial or professional user with sufficient information to handle the substance safely.

Appendix: Glossary of selected terms used in this guidance document

ADR	the European Agreement concerning the International Carriage of Dangerous Goods by Road (concluded in Geneva on 30 September 1957) that has been implemented within the EU through Directive 2008/68/EC;
Acute toxicity	those adverse effects occurring following oral or dermal administration of a single dose of a substance or a mixture, or multiple doses given within 24 hours, or an inhalation exposure of 4 hours;
Acute aquatic toxicity	the intrinsic property of a substance to be injurious to an organism in a short term exposure to that substance;
Aerosols	this means aerosol dispensers, are any non-refillable receptacles made of metal, glass or plastics and containing a gas compressed, liquefied or dissolved under pressure, with or without a liquid, paste or powder, and fitted with a release device allowing the contents to be ejected as solid or liquid particles in suspension in a gas, as a foam, paste or powder or in a liquid state or in a gaseous state;
Alloy	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 the CLP Regulation;
Article	an object which during production is given a special shape, surface or design which determines its function to a greater degree than does its chemical composition;
Aspiration	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;
BPR	Regulation (EU) No 528/2012 of the European Parliament and of the Council of 22 May 2012 concerning the making available on the market and use of biocidal products (Biocidal Products Regulation);
Carcinogen	a substance or a mixture of substances which induces cancer or increases its incidence;
CAS	Chemical Abstract Service;

Chemically unstable gas	a flammable gas that is able to react explosively even in the absence of air or oxygen;
Chronic aquatic toxicity	the intrinsic property of a substance to cause adverse effects to aquatic organisms during exposures which are determined in relation to the life-cycle of the organism;
CLP or CLP Regulation	Regulation (EC) No 1272/2008 on Classification, Labelling and Packaging of Substances and Mixtures;
CMR	a substance or mixture which is carcinogenic, mutagenic or toxic to reproduction;
Competent authority (CA)	the authority or authorities or bodies established by the member states to carry out the obligations arising from the CLP Regulation;
Corrosive to metals	a substance or a mixture which by chemical action will materially damage, or even destroy metals;
CRC	child-resistant closure;
CRF	child-resistant fastening;
Distributor	any natural or legal person established within the Community, including a retailer, who only stores and places on the market a substance, on its own or in a mixture, for third parties;
Downstream user	any natural or legal person established within the Community, other than the manufacturer or the importer, who uses a substance, either on its own or in a mixture, in the course of his industrial or professional activities. A distributor or a consumer is not a downstream user. A re-importer, exempted pursuant to Article 2(7)(c) REACH Regulation, shall be regarded as a downstream user;
DPD	Dangerous Preparations Directive (1999/45/EC);
DSD	Dangerous Substances Directive (67/548/EEC);
ECHA	European Chemicals Agency or "the Agency," established under the REACH Regulation;
EU	European Union;
Explosive article	an article containing one or more explosive substances or mixtures;
Explosive substance or mixtures	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;
Eye irritation	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;
Flammable gas	a gas or gas mixture having a flammable range with air at 20 °C and a standard pressure of 101.3 kPa;
Flammable liquid	a liquid having a flash point of not more than 60°C;
Flash point	the lowest temperature (corrected to a standard pressure of 101.3 kPa) at which the application of an ignition source causes the vapours of a liquid to ignite under specified test conditions;
Flammable solid	<p>a solid which is readily combustible, or may cause or contribute to fire through friction.</p> <p>Readily combustible solids are powdered, granular, or pasty substances or mixtures which are dangerous if they can be easily ignited by brief contact with an ignition source, such as a burning match, and if the flame spreads rapidly;</p>
GHS	Globally Harmonised System of Classification and Labelling of Chemicals developed within the United Nations (UN) structure - the international criteria agreed by the United Nation Economic and Social Council (UN ECOSOC) for the classification and labelling of hazardous substances and mixtures;
Hazard category	the division of criteria within each hazard class, specifying hazard severity;
Hazard class	the nature of the physical, health or environmental hazard;
Hazard pictogram	graphical composition that includes a symbol plus other graphic elements, such as a border, background pattern or colour that is intended to convey specific information about the hazard concerned;
Hazard statement	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 to the CLP Regulation;

IMDG Code	International Maritime Dangerous Goods Code for the transport of dangerous goods by sea;
Import	the physical introduction into the customs territory of the Community;
Importer	any natural or legal person established within the Community who is responsible for import;
INCI	International Nomenclature of Cosmetic Ingredients;
Intermediate packaging	packaging placed between inner packaging, or articles, and outer packaging;
IUCLID	International Uniform Chemical Information Database;
IUPAC	International Union of Pure and Applied Chemistry;
Label	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 packaging of a hazardous substances or mixture (definition follows Chapter 1.2 of the UN GHS);
Label element	one type of information that has been harmonised for use in a label, e.g. hazard pictogram, signal word;
Manufacturer	any natural or legal person established within the Community who manufactures a substance within the Community;
Manufacturing	production or extraction of substances in the natural state;
Mixture	means a mixture or solution composed of two or more substances. The UN GHS Chapter 1.2 includes the phrase, "in which they do not react" at the end of an otherwise identical definition;
Mutagen	an agent giving rise to an increased occurrence of mutations in populations of cells and /or organisms;

Organic peroxides	liquid or solid organic substances which contain the bivalent -O-O- structure and may be considered derivatives of hydrogen peroxide, where one or both of the hydrogen atoms have been replaced by organic radicals. The term organic peroxide includes organic peroxide mixtures (formulations) containing at least one organic peroxide. Organic peroxides are thermally unstable substances or mixtures, which can undergo exothermic self-accelerating decomposition. In addition, they can have one or more of the following properties: <ul style="list-style-type: none">(i) be liable to explosive decomposition;(ii) burn rapidly;(iii) be sensitive to impact or friction;(iv) react dangerously with other substances;
Oxidising gas	any gas or gas mixture which may, generally by providing oxygen, cause or contribute to the combustion of other material more than air does;
Oxidising liquid	a liquid substance or mixture which, while in itself not necessarily combustible, may, generally by yielding oxygen, cause, or contribute to, the combustion of other material;
Oxidising solid	a solid substance or mixture which, while in itself not necessarily combustible, may, generally by yielding oxygen, cause, or contribute to, the combustion of other material;
Package	the complete product of the packing operation, consisting of the packaging and its contents;
Packaging	one or more receptacles and any other components or materials necessary for the receptacles to perform their containment and other safety functions;
Placing on the market	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;
PPPR	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 and repealing Council Directives 79/117/EEC and 91/414/EEC;

Precautionary statement	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;
Product identifier	details permitting the identification of the substance or mixture;
Pyrophoric liquid	a liquid substance or mixture which, even in small quantities, is liable to ignite within five minutes after coming into contact with air;
Pyrophoric solid	a solid substance or mixture which, even in small quantities, is liable to ignite within five minutes after coming into contact with air;
Pyrotechnic article	an article containing one or more pyrotechnic substances or mixtures;
Pyrotechnic substance or mixture	a substance or mixture of substances designed to produce an effect by heat, light, sound, gas or smoke or a combination of these as the result of non-detonative self-sustaining exothermic chemical reactions;
REACH or REACH Regulation	Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals;
Registrant	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;
Reproductive toxicity	includes adverse effects on sexual function and fertility in adult males and females, as well as developmental toxicity in the offspring and effects on or via lactation;
Respiratory sensitiser	a substance that will lead to hypersensitivity of the airways following inhalation of the substance;
SDS	safety data sheet;
Self-heating substance or mixture	a liquid or solid substance or mixture, other than a pyrophoric liquid or solid, which, by reaction with air and without energy supply, is liable to self-heat; this substance or mixture differs from a pyrophoric liquid or solid in that it will ignite only when in large amounts (kilograms) and after long periods of time (hours or days);
Self-reactive substances or mixtures	thermally unstable liquid or solid substances or mixtures liable to undergo a strongly exothermic decomposition even without participation of oxygen (air). This definition excludes substances and mixtures classified

Serious eye damage	according to the CLP Regulation as explosives, organic peroxides or as oxidising; the production of tissue damage in the eye, or serious physical decay of vision, following application of a test substance to the anterior surface of the eye, which is not fully reversible within 21 days of application;
Signal word	a word that indicates the relative level of severity of hazards to alert the potential reader of the hazard; the following two levels are distinguished: a) Danger means a signal word indicating the more severe hazard categories; and b) Warning means a signal word indicating the less severe hazard categories;
Skin corrosion	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;
Skin irritation	the production of reversible damage to the skin following the application of a test substance for up to 4 hours;
Skin sensitiser	a substance that will lead to an allergic response following skin contact;
Specific target organ toxicity	specific target organ toxicity, cf. STOT, STOT-SE and STOT-RE;
STOT-SE	specific, non lethal target organ toxicity arising from a single exposure to a substance or mixture;
STOT-RE	specific, target organ toxicity arising from a repeated exposure to a substance or mixture;
Substance	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;
Supplier	any manufacturer, importer, downstream user or distributor placing on the market a substance, on its own or in a mixture, or a mixture;
Trade name	a designation under which a substance or mixture is placed on the market;
TWD	tactile warnings of danger;

UFI	Unique Formula Identifier;
UN	United Nations;
UN RTDG	the United Nations Recommendations on the Transport of Dangerous Goods;
Unstable explosive	an explosive substance or mixture which is thermally unstable and/or too sensitive for normal handling, transport and use;
Use	any processing, formulation, consumption, storage, keeping, treatment, filling into containers, transfer from one container to another, mixing, production of an article or any other utilisation.

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