CODIFICATION OF HAZARD STATEMENTS, CODIFICATION AND USE OF PRECAUTIONARY STATEMENTS, CODIFICATION OF HAZARD PICTOGRAMS AND EXAMPLES OF PRECAUTIONARY PICTOGRAMS

Section 1

CODIFICATION OF HAZARD STATEMENTS

A3.1.1 Introduction

A3.1.1.1 *Hazard statement* means a statement assigned to a hazard class and category that describes the nature of the hazards of a hazardous product, including, where appropriate, the degree of hazard.

A3.1.1.2 This section contains the recommended codes assigned to each of the hazard statements applicable to the hazard categories under the GHS.

A3.1.1.3 The hazard statement codes are intended to be used for reference purposes. They are not part of the hazard statement text and should not be used to replace it.

A3.1.2 Codification of hazard statements

A3.1.2.1 Hazard statements are assigned a unique alphanumerical code which consists of one letter and three numbers, as follows:

- (a) the letter "H" (for "hazard statement");
- (b) a number designating the type of hazard to which the hazard statement is assigned according to the numbering of the different parts of the GHS, as follows:
 - "2" for physical hazards;
 - "3" for health hazards;
 - "4" for environmental hazards;
- (c) two numbers corresponding to the sequential numbering of hazards arising from the intrinsic properties of the substance or mixture, such as explosivity (codes from 200 to 210), flammability (codes from 220 to 230), etc.

A3.1.2.2 The codes to be used for designating hazard statements are listed, in numerical order, in Table A3.1.1 for physical hazards, Table A3.1.2 for health hazards and Table A3.1.3 for environmental hazards. Each table is divided into 4 columns containing the following information:

- Column (1) The hazard statement code;
- Column (2) The hazard statement text;

The text in bold should appear on the label, except as otherwise specified. The information in italics should also appear as part of the hazard statement when the information is known.

For example: "causes damages to organs (or 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)".

- Column (3) Hazard class, with a reference to the chapter of the GHS where information about the hazard class may be found.
- Column (4) The hazard category or categories within a hazard class for which the use of a hazard statement is applicable.

A3.1.2.3 In addition to individual hazard statements, a number of combined hazard statements are given in Table A3.1.2. The alphanumerical codes for the combined statements are constructed from the codes for the individual

statements that are combined, conjoined with the plus ("+") sign. For example, H300 + H310 indicates that the text to appear on the label is "Fatal if swallowed or in contact with skin".

A3.1.2.4 All assigned hazard statements should appear on the label unless otherwise specified in 1.4.10.5.3.3. The competent authority may specify the order in which they appear. Also, where a combined hazard statement is indicated for two or more hazard statements, the competent authority may specify whether the combined hazard statement or the corresponding individual statements should appear on the label, or may leave the choice to the manufacturer/supplier.

Code	Physical hazard statements	Hazard class (GHS chapter)	Hazard category
(1)	(2)	(3)	(4)
H200	Unstable explosive	Explosives (chapter 2.1)	Unstable explosive
H201	Explosive; mass explosion hazard	Explosives (chapter 2.1)	Division 1.1
H202	Explosive; severe projection hazard	Explosives (chapter 2.1)	Division 1.2
H203	Explosive; fire, blast or projection hazard	Explosives (chapter 2.1)	Division 1.3
H204	Fire or projection hazard	Explosives (chapter 2.1)	Division 1.4
H205	May mass explode in fire	Explosives (chapter 2.1)	Division 1.5
H206	Fire, blast or projection hazard; increased risk of explosion if desensitizing agent is reduced	Desensitized explosives (chapter 2.17)	1
H207	Fire or projection hazard; increased risk of explosion if desensitizing agent is reduced	Desensitized explosives (chapter 2.17)	2, 3
H208	Fire hazard; increased risk of explosion if desensitizing agent is reduced	Desensitized explosives (chapter 2.17)	4
H220	Extremely flammable gas	Flammable gases (chapter 2.2)	1A
H221	Flammable gas	Flammable gases (chapter 2.2)	1B, 2
H222	Extremely flammable aerosol	Aerosols (chapter 2.3)	1
H223	Flammable aerosol	Aerosols (chapter 2.3)	2
H224	Extremely flammable liquid and vapour	Flammable liquids (chapter 2.6)	1
H225	Highly flammable liquid and vapour	Flammable liquids (chapter 2.6)	2
H226	Flammable liquid and vapour	Flammable liquids (chapter 2.6)	3
H227	Combustible liquid	Flammable liquids (chapter 2.6)	4
H228	Flammable solid	Flammable solids (chapter 2.7)	1, 2
H229	Pressurized container: may burst if heated	Aerosols (chapter 2.3)	1, 2, 3
H230	May react explosively even in the absence of air	even in the absence of Flammable gases (chapter 2.2)	
H231	May react explosively even in the absence of air at elevated pressure and/or temperature	Flammable gases (chapter 2.2)	1A, chemically unstable gas B
H232	May ignite spontaneously if exposed to air	Flammable gases (chapter 2.2)	1A, pyrophoric gas
H240	Heating may cause an explosion	Self-reactive substances and mixtures (chapter 2.8); and Organic peroxides (chapter 2.15)	Туре А

 Table A3.1.1: Hazard statement codes for physical hazards

Code	Physical hazard statements	Hazard class (GHS chapter)	Hazard category
(1)	(2)	(3)	(4)
H241	Heating may cause a fire or explosion	Self-reactive substances and mixtures (chapter 2.8); and Organic peroxides (chapter 2.15)	Туре В
H242	Heating may cause a fire	Self-reactive substances and mixtures (chapter 2.8); and Organic peroxides (chapter 2.15)	Types C, D, E, F
H250	Catches fire spontaneously if exposed to air	Pyrophoric liquids (chapter 2.9); Pyrophoric solids (chapter 2.10)	1
H251	Self-heating; may catch fire	Self-heating substances and mixtures (chapter 2.11)	1
H252	Self-heating in large quantities; may catch fire	Self-heating substances and mixtures (chapter 2.11)	2
H260	In contact with water releases flammable gases which may ignite spontaneously		
H261	In contact with water releases flammable gas		
H270	May cause or intensify fire; oxidizer	Oxidizing gases (chapter 2.4)	1
H271	May cause fire or explosion; strong oxidizer	Oxidizing liquids (chapter 2.13); Oxidizing solids (chapter 2.14)	1
H272	May intensify fire; oxidizer	Oxidizing liquids (chapter 2.13); Oxidizing solids (chapter 2.14)	2, 3
H280	Contains gas under pressure; may explode if heated	Gases under pressure (chapter 2.5)	Compressed gas Liquefied gas Dissolved gas
H281	Contains refrigerated gas; may cause cryogenic burns or injury	Gases under pressure (chapter 2.5)	Refrigerated liquefied gas
H290	May be corrosive to metals	Corrosive to metals (chapter 2.16)	1

Code	Health hazard statements	Hazard class (GHS chapter)	Hazard category
(1)	(2)	(3)	(4)
H300	Fatal if swallowed	Acute toxicity, oral (chapter 3.1)	1, 2
H301	Toxic if swallowed	Acute toxicity, oral (chapter 3.1)	3
H302	Harmful if swallowed	Acute toxicity, oral (chapter 3.1)	4
H303	May be harmful if swallowed	Acute toxicity, oral (chapter 3.1)	5
H304	May be fatal if swallowed and enters airways	Aspiration hazard (chapter 3.10)	1
H305	May be harmful if swallowed and enters airways	Aspiration hazard (chapter 3.10)	2
H310	Fatal in contact with skin	Acute toxicity, dermal (chapter 3.1)	1, 2
H311	Toxic in contact with skin	Acute toxicity, dermal (chapter 3.1)	3
H312	Harmful in contact with skin	Acute toxicity, dermal (chapter 3.1)	4
H313	May be harmful in contact with skin	Acute toxicity, dermal (chapter 3.1)	5
H314	Causes severe skin burns and eye damage	Skin corrosion/irritation (chapter 3.2)	1A, 1B, 1C
H315	Causes skin irritation	Skin corrosion/irritation (chapter 3.2)	2
H316	Causes mild skin irritation	Skin corrosion/irritation (chapter 3.2)	3
H317	May cause an allergic skin reaction	Sensitisation, skin (chapter 3.4)	1, 1A, 1B
H318	Causes serious eye damage Serious eye damage/eye irrita (chapter 3.3)		1
H319	Causes serious eye irritation Serious eye damage/eye irritation (chapter 3.3)		2A
H320	Causes eye irritation	Serious eye damage/eye irritation (chapter 3.3)	2B
H330	Fatal if inhaled	Acute toxicity, inhalation (chapter 3.1)	1, 2
H331	Toxic if inhaled	Acute toxicity, inhalation (chapter 3.1)	3
H332	Harmful if inhaled	Acute toxicity, inhalation (chapter 3.1)	4
H333	May be harmful if inhaled	Acute toxicity, inhalation (chapter 3.1)	5
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled	Sensitisation, respiratory (chapter 3.4)	1, 1A, 1B
H335	May cause respiratory irritation	Specific target organ toxicity, single exposure; Respiratory tract irritation (chapter 3.8);	3
H336	May cause drowsiness or dizziness	Specific target organ toxicity, single exposure; Narcotic effects (chapter 3.8)	3
H340	May cause genetic defects (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)	Germ cell mutagenicity (chapter 3.5)	1A, 1B
H341	Suspected of causing genetic defects (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)	Germ cell mutagenicity (chapter 3.5)	2
H350	May cause cancer (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)	Carcinogenicity (chapter 3.6)	1A, 1B

Table A3.1.2: Hazard statement codes for health hazards

Code	Health hazard statements	Hazard class (GHS chapter)	Hazard category
(1)	(2)	(3)	(4)
H351	Suspected of causing cancer (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)	Carcinogenicity (chapter 3.6)	2
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)	Reproductive toxicity (chapter 3.7)	1A, 1B
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) Reproductive toxicity (chapter 3.7)		2
H362	May cause harm to breast-fed children	Reproductive toxicity, effects on or via lactation (chapter 3.7)	Additional category
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) Specific target organ toxicity, single exposure (chapter 3.8)		1
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)	Specific target organ toxicity, single exposure (chapter 3.8)	2
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)	Specific target organ toxicity, repeated exposure (chapter 3.9)	1
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)	Specific target organ toxicity, repeated exposure (chapter 3.9)	2
H300 + H310	Fatal if swallowed or in contact with skin	Acute toxicity, oral (chapter 3.1) and acute toxicity dermal (chapter 3.1)	1, 2
H300 + H330	Fatal if swallowed or if inhaled	Acute toxicity, oral (chapter 3.1) and acute toxicity, inhalation (chapter 3.1)	1, 2
H310 + H330	Fatal in contact with skin or if inhaled	Acute toxicity, dermal (chapter 3.1) and acute toxicity, inhalation (chapter 3.1)	1, 2
H300 + H310 + H330	Fatal if swallowed, in contact with skin or if inhaled	Acute toxicity, oral (chapter 3.1), acute toxicity, dermal (chapter 3.1) and acute toxicity, inhalation (chapter 3.1)	1, 2
H301 + H311	Toxic if swallowed or in contact with skin	Acute toxicity, oral (chapter 3.1) and acute toxicity dermal (chapter 3.1)	3

Code	Health hazard statements Hazard class (GHS chapter)		Hazard category
(1)	(2)	(3)	(4)
H301 + H331	Toxic if swallowed or if inhaled	Acute toxicity, oral (chapter 3.1) and acute toxicity, inhalation (chapter 3.1)	3
H311 + H331	Toxic in contact with skin or if inhaled	Acute toxicity, dermal (chapter 3.1) and acute toxicity, inhalation (chapter 3.1)	3
H301 + H311 + H331	Toxic if swallowed, in contact with skin or if inhaled	Acute toxicity, oral (chapter 3.1), acute toxicity, dermal (chapter 3.1) and acute toxicity, inhalation (chapter 3.1)	3
H302 + H312	Harmful if swallowed or in contact with skin	Acute toxicity, oral (chapter 3.1) and acute toxicity dermal (chapter 3.1)	4
H302 + H332	Harmful if swallowed or if inhaled	Acute toxicity, oral (chapter 3.1) and acute toxicity, inhalation (chapter 3.1)	4
H312 + H332	Harmful in contact with skin or if inhaled	Acute toxicity, dermal (chapter 3.1) and acute toxicity, inhalation (chapter 3.1)	4
H302 + H312 + H332	Harmful if swallowed, in contact with skin or if inhaled	Acute toxicity, oral (chapter 3.1), acute toxicity, dermal (chapter 3.1) and acute toxicity, inhalation (chapter 3.1)	4
H303 + H313	May be harmful if swallowed or in contact with skin	Acute toxicity, oral (chapter 3.1) and acute toxicity dermal (chapter 3.1)	5
H303 + H333	May be harmful if swallowed or if inhaled	Acute toxicity, oral (chapter 3.1) and acute toxicity, inhalation (chapter 3.1)	5
H313 + H333	May be harmful in contact with skin or if inhaled	Acute toxicity, dermal (chapter 3.1) and acute toxicity, inhalation (chapter 3.1)	5
H303 + H313 + H333	May be harmful if swallowed, in contact with skin or if inhaled	Acute toxicity, oral (chapter 3.1), acute toxicity, dermal (chapter 3.1) and acute toxicity, inhalation (chapter 3.1)	5
H315 + H320	Causes skin and eye irritation	Skin corrosion/irritation (chapter 3.2) and serious eye damage/eye irritation (chapter 3.3)	2 (skin)/2B (eye)

Code	Environmental hazard statements	Hazard class (GHS chapter)	Hazard category	
(1)	(2)	(3)	(4)	
H400	Very toxic to aquatic life	Hazardous to the aquatic environment, acute hazard (chapter 4.1)	1	
H401	Toxic to aquatic life	Hazardous to the aquatic environment, acute hazard (chapter 4.1)	2	
H402	Harmful to aquatic life	uatic lifeHazardous to the aquatic environment, acute hazard (chapter 4.1)		
H410	Very toxic to aquatic life with long lasting effects	Hazardous to the aquatic environment, long-term hazard (chapter 4.1)	1	
H411	Toxic to aquatic life with long lasting effects	Hazardous to the aquatic environment, long-term hazard (chapter 4.1)	2	
H412	Harmful to aquatic life with long lasting effects	Hazardous to the aquatic environment, long-term hazard (chapter 4.1)	3	
H413	May cause long lasting harmful effects to aquatic life	Hazardous to the aquatic environment, long-term hazard (chapter 4.1)	4	
H420	Harms public health and the environment by destroying ozone in the upper atmosphere	Hazardous to the ozone layer (chapter 4.2)	1	

Table A3.1.3:	Hazard stat	ement codes for	environmental hazards
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Section 2

CODIFICATION OF PRECAUTIONARY STATEMENTS

A3.2.1 Introduction

A3.2.1.1 A *precautionary statement* is a phrase (and/or pictogram) which describes recommended measures that should be taken to minimize or prevent adverse effects resulting from exposures to a hazardous product, or improper storage or handling of a hazardous product (see 1.4.10.5.2 (c)).

A3.2.1.2 For the purposes of the GHS, there are five types of precautionary statements: **general, prevention, response** (in case of accidental spillage or exposure, emergency response and first-aid), **storage** and **disposal**. For guidance on the use of GHS precautionary statements, including advice on the selection of the appropriate statements for each GHS hazard class and category, see section 3 to this annex.

A3.2.1.3 This section contains the recommended codes for each of the precautionary statement included in this annex.

A3.2.2 Codification of precautionary statements

A3.2.2.1 Precautionary statements are assigned a unique alphanumerical code which consists of one letter and three numbers as follows:

- (a) a letter "P" (for "precautionary statement")
- (b) one number designating the type of precautionary statement as follows:
 - "1" for general precautionary statements;
 - "2" for prevention precautionary statements;
 - "3" for response precautionary statements;
 - "4" for storage precautionary statements;
 - "5" for disposal precautionary statements;
- (c) two numbers (corresponding to the sequential numbering of precautionary statements)

A3.2.2.2 The precautionary statement codes are intended to be used for reference purposes. They are not part of the precautionary statement text and should not be used to replace it.

A3.2.2.3 The codes to be used for designating precautionary statements are listed, in numerical order, in Table A3.2.1 for general precautionary statements, Table A3.2.2 for prevention precautionary statements, Table A3.2.3 for response precautionary statements, Table A3.2.4 for storage precautionary statements and Table A3.2.5 for disposal precautionary statements.

A3.2.3 Structure of the precautionary statement codification tables

A3.2.3.1 Each table is divided into 5 columns containing the following information:

- Column (1) The precautionary statement code;
- Column (2) The precautionary statement text;
- Column (3) The hazard class and the route of exposure, where relevant, for which the use of a precautionary statement is recommended together with a reference to the chapter of the GHS where information about the hazard class may be found.
- Column (4) The hazard category or categories within a hazard class for which the use of a precautionary statement is applicable.
- Column (5) Where applicable, conditions relating to the use of a precautionary statement;

A3.2.3.2 The tables show the **core part of the precautionary statements in bold print** in column (2). This is the text, except as otherwise specified, that should appear on the label. Derogations from the recommended labelling statements are at the discretion of competent authorities.

A3.2.3.3 When a forward slash or diagonal mark [/] appears in a precautionary statement text in column (2), it indicates that a choice has to be made between the phrases they separate. In such cases, the manufacturer or supplier can choose, or the competent authorities may prescribe one or more appropriate phrase(s). For example in P280 "Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/..." could read "wear eye protection" or "wear eye and face protection".

A3.2.3.4 When three full stops [...] appears in a precautionary statement text in column (2), they indicate that all applicable conditions are not listed. For example in P241 "Use explosion-proof [electrical/ventilating/lighting/...] equipment", the use of "..." indicates that other equipment may need to be specified. Further details of the information to be provided may be found in column (5). In such cases the manufacturer or supplier can choose, or the competent authorities may prescribe the other conditions to be specified.

A3.2.3.5 In cases where additional information is required or information has to be specified, this is indicated by a relevant entry in column (5) in plain text.

A3.2.3.6 When *text in italics* is used in column (5), this indicates specific conditions applying to the use or allocation of the precautionary statement. This may relate to conditions attaching to either the general use of a precautionary statement or its use for a particular hazard class and/or hazard category. For example, for P241 "Use **explosion-proof [electrical/ventilating/lighting/...]equipment**", only applies for flammable solids "*if dust clouds can occur*".

A3.2.3.7 Where square brackets [...] appear around some text in a precautionary statement, this indicates 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 explaining when the text should be used are given in column (5). For example, P284 states: "[In case of inadequate ventilation] wear respiratory protection." This statement is given with the 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 the condition for use should be interpreted as follows: If additional information is provided with the chemical explaining what type of ventilation wear respiratory protection." However, if the chemical is supplied without such information, the text in square brackets should not be used, and the precautionary statement should read: "Wear respiratory protection."

A3.2.3.8 To facilitate translation into the languages of users, precautionary statements have been broken down into individual sentences or parts of sentences in the tables in this section. In a number of instances the text that appears on a GHS label requires that these be added back together. This is indicated in this annex by codes conjoined with a plus sign "+". For example P305 + P351 + P338 indicates that the text to appear on the label is "IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing". These additive precautionary statements can also be found at the end of each of the precautionary statement tables in this section. Translation of only the single precautionary statements is required, as this will enable the compilation of the additive precautionary statements.

Table A3.2.1: Codification of general precautionary statements

Code	General precautionary statements	Hazard class	Hazard category	Conditions for use
(1)	(2)	(3)	(4)	(5)
P101	If medical advice is needed, have product container or label at hand.	as appropriate		Consumer products
P102	Keep out of reach of children.	as appropriate		Consumer products
P103	Read carefully and follow all instructions.	as appropriate		Consumer products - omit where P202 is used.

Table A3.2.2: Codification of prevention precautionary statements

Code	Prevention precautionary statements	Hazard class	Hazard category	Conditions for use
(1)	(2)	(3)	(4)	(5)
P201	Obtain special instructions before use.	Explosives (chapter 2.1)	Unstable explosive	
		Germ cell mutagenicity (chapter 3.5)	1A, 1B, 2	- omit for consumer products where P202 is used.
		Carcinogenicity (chapter 3.6)	1A, 1B, 2	
		Reproductive toxicity (chapter 3.7)	1A, 1B, 2	
		Reproductive toxicity, effects on or via lactation (chapter 3.7)	Additional category	
P202	Do not handle until all safety precautions have been read and understood.	Flammable gases (chapter 2.2)	A, B (chemically unstable gases)	
		Germ cell mutagenicity (chapter 3.5)	1A, 1B, 2	
		Carcinogenicity (chapter 3.6)	1A, 1B, 2	
		Reproductive toxicity (chapter 3.7)	1A, 1B, 2	
		Reproductive toxicity, effects on or via lactation (chapter 3.7)	Additional category	

Code	Prevention precautionary statements	Hazard class	Hazard category	Conditions for use
(1)	(2)	(3)	(4)	(5)
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No	Explosives (chapter 2.1)	Divisions 1.1, 1.2, 1.3, 1.4, 1.5	
	smoking.	Flammable gases (chapter 2.2)	1A, 1B, 2	-
		Aerosols (chapter 2.3)	1, 2, 3	-
		Flammable liquids (chapter 2.6)	1, 2, 3, 4	-
		Flammable solids (chapter 2.7)	1, 2, 3, 1	-
		Self-reactive substances and mixtures (chapter 2.8)	Types	-
		Sen-reactive substances and mixtures (enapter 2.6)	A, B, C, D, E, F	
		Pyrophoric liquids (chapter 2.9)	1	
		Pyrophoric solids (chapter 2.10)	1	
		Oxidizing liquids (chapter 2.13)	1, 2, 3	
		Oxidizing solids (chapter 2.14)	1, 2, 3	
		Organic peroxides (chapter 2.15)	Types A, B, C, D, E, F	
		Desensitized explosives (chapter 2.17)	1, 2, 3, 4	
P211	Do not spray on an open flame or other ignition source.	Aerosols (chapter 2.3)	1, 2	
P212	Avoid heating under confinement or reduction of the desensitized agent	Desensitized explosives (chapter 2.17)	1, 2, 3, 4	
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P220	Keep away from clothing and other combustible materials.	Oxidizing gases (chapter 2.4)	1	-
	combustible materials.	Oxidizing liquids (chapter 2.13)	1, 2, 3	-
		Oxidizing solids (chapter 2.14)	1, 2, 3	
P222	Do not allow contact with air.	Flammable gases (chapter 2.2)	Pyrophoric gas	<i>– if emphasis of the hazard statement is deemed necessary.</i>
		Pyrophoric liquids (chapter 2.9)	1	necessary.
		Pyrophoric solids (chapter 2.10)	1	
P223	Do not allow contact with water.	Substances and mixtures which, in contact with water, emit flammable gases (chapter 2.12)	1, 2	- if emphasis of the hazard statement is deemed necessary.
P230	Keep wetted with	Explosives (chapter 2.1)	Divisions 1.1, 1.2, 1.3, 1.5	 for substances and mixtures which are wetted, diluted, dissolved or suspended with a phlegmatizer in order to suppress their explosive properties Manufacturer/supplier or the competent authority to specify appropriate material.
		Desensitized explosives (chapter 2.17)	1, 2, 3, 4	Manufacturer/supplier or the competent authority to specify appropriate material.

Code	Prevention precautionary statements	Hazard class	Hazard category	Conditions for use
(1)	(2)	(3)	(4)	(5)
P231	Handle and store contents under inert gas/	Pyrophoric liquids (chapter 2.9)	1	Manufacturer/supplier or the competent authority to
		Pyrophoric solids (chapter 2.10)	1	specify appropriate liquid or gas if "inert gas" is not appropriate.
		Substances and mixtures which, in contact with water, emit flammable gases (chapter 2.12)	1, 2, 3	 <i>if the substance or mixture reacts readily with moisture in air.</i> Manufacturer/supplier or the competent authority to specify appropriate liquid or gas if "inert gas" is not appropriate.
P232	Protect from moisture.	Substances and mixtures which, in contact with water, emit flammable gases (chapter 2.12)	1, 2, 3	
P233	Keep container tightly closed.	Flammable liquids (chapter 2.6)	1, 2, 3	<i>– if the liquid is volatile and may generate an explosive atmosphere.</i>
		Pyrophoric liquids (chapter 2.9)	1	
		Pyrophoric solids (chapter 2.10)	1	
		Desensitized explosives (chapter 2.17)	1, 2, 3, 4	
		Acute toxicity, inhalation (chapter 3.1)	1, 2, 3	– if the chemical is volatile and may generate a
		Specific target organ toxicity, single exposure; respiratory tract irritation (chapter 3.8)	3	hazardous atmosphere.
		Specific target organ toxicity, single exposure; narcotic effects (chapter 3.8)	3	
P234	Keep only in original packaging.	Explosives (chapter 2.1)	Divisions 1.1, 1.2, 1.3, 1.4, 1.5	
		Self-reactive substances and mixtures (chapter 2.8)	Types A, B, C, D, E, F	
		Organic peroxides (chapter 2.15)	Types A, B, C, D, E, F	
		Corrosive to metals (chapter 2.16)	1	_
P235	Keep cool.	Flammable liquids (chapter 2.6)	1, 2, 3	- for flammable liquids Category 1 and other flammable liquids that are volatile and may generate an explosive atmosphere.
		Self-reactive substances and mixtures (chapter 2.8)	Types A, B, C, D, E, F	– may be omitted if P411 is given on the label.
		Self-heating substances and mixtures (chapter 2.11)	1, 2	– may be omitted if P413 is given on the label.
		Organic peroxides (chapter 2.15)	Types A, B, C, D, E, F	– may be omitted if P411 is given on the label.

Code	Prevention precautionary statements	Hazard class	Hazard category	Conditions for use
(1)	(2)	(3)	(4)	(5)
P240	Ground and bond container and receiving equipment.	Explosives (chapter 2.1)	Divisions 1.1, 1.2, 1.3, 1.4, 1.5	<i>– if the explosive is electrostatically sensitive.</i>
		Flammable liquids (chapter 2.6)	1, 2, 3	 if the liquid is volatile and may generate an explosive atmosphere.
		Flammable solids (chapter 2.7)	1, 2	- <i>if the solid is electrostatically sensitive.</i>
		Self-reactive substances and mixtures (chapter 2.8)	Types A, B, C, D, E, F	 if electrostatically sensitive and able to generate an explosive atmosphere.
		Organic peroxides (chapter 2.15)	Types A, B, C, D, E, F	- if electrostatically sensitive and able to generate an explosive atmosphere.
P241	Use explosion-proof [electrical/ventilating/lighting/] equipment.	Flammable liquids (chapter 2.6)	1, 2, 3	 if the liquid is volatile and may generate an explosive atmosphere. text in square brackets may be used to specify specific electrical, ventilating, lighting or other equipment if necessary and as appropriate. precautionary statement may be omitted where local or national legislation introduces more specific provisions.
		Flammable solids (chapter 2.7)	1, 2	 if dust clouds can occur. text in square brackets may be used to specify specific electrical, ventilating, lighting or other equipment if necessary and as appropriate. precautionary statement may be omitted where local or national legislation introduces more specific provisions.
P242	Use non-sparking tools.	Flammable liquids (chapter 2.6)	1, 2, 3	 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 minimum ignition energy is <0.1mJ, e.g. carbon disulphide).
P243	Take action to prevent static discharges.	Flammable liquids (chapter 2.6)	1, 2, 3	 if the liquid is volatile and may generate an explosive atmosphere. may be omitted where local or national legislation introduces more specific provisions.
P244	Keep valves and fittings free from oil and grease.	Oxidizing gases (chapter 2.4)	1	

Code	Prevention precautionary statements	Hazard class	Hazard category	Conditions for use
(1)	(2)	(3)	(4)	(5)
P250	Do not subject to grinding/shock/friction/	Explosives (chapter 2.1)	Unstable explosive and divisions 1.1, 1.2, 1.3, 1.4, 1.5	 <i>if the explosive is mechanically sensitive</i> Manufacturer/supplier or the competent authority to specify applicable rough handling.
P251	Do not pierce or burn, even after use.	Aerosols (chapter 2.3)	1, 2, 3	
P260	Do not breathe	Acute toxicity – inhalation (chapter 3.1)	1, 2	Manufacturer/supplier or the competent authority
	dust/fume/gas/mist/vapours/spray.	Specific target organ toxicity, single exposure (chapter 3.8)	1, 2	specify applicable conditions.
		Specific target organ toxicity, repeated exposure (chapter 3.9)	1, 2	
		Skin corrosion (chapter 3.2)	1A, 1B, 1C	- specify do not breathe dusts or mists
		Reproductive toxicity – effects on or via lactation (chapter 3.7)	Additional category	- if inhalable particles of dusts or mists may occur during use.
P261	Avoid breathing	Acute toxicity – inhalation (chapter 3.1)	3, 4	– may be omitted if P260 is given on the label.
	dust/fume/gas/mist/vapours/spray.	Respiratory sensitization (chapter 3.4)	1, 1A, 1B	Manufacturer/supplier or the competent authority to
		Skin sensitization (chapter 3.4)	1, 1A, 1B	specify applicable conditions.
		Specific target organ toxicity, single exposure; respiratory tract irritation (chapter 3.8)	3	
		Specific target organ toxicity, single exposure; narcotic effects (chapter 3.8)	3	
P262	Do not get in eyes, on skin, or on clothing.	Acute toxicity – dermal (chapter 3.1)	1, 2	
P263	Avoid contact during pregnancy and while nursing.	Reproductive toxicity – effects on or via lactation (chapter 3.7)	Additional category	
P264	Wash thoroughly after handling.	Acute toxicity – oral (chapter 3.1)	1, 2, 3, 4	Manufacturer/supplier or the competent authority to
		Acute toxicity – dermal (chapter 3.1)	1, 2	specify parts of the body to be washed after handling.
		Skin corrosion (chapter 3.2)	1A, 1B, 1C	
		Skin irritation (chapter 3.2)	2	
		Eye irritation (chapter 3.3)	2A, 2B	
		Reproductive toxicity – effects on or via lactation (chapter 3.7)	Additional category	
		Specific target organ toxicity, single exposure (chapter 3.8)	1, 2	Manufacturer/supplier or the competent authority to specify parts of the body to be washed after handling.
		Specific target organ toxicity, repeated exposure (chapter 3.9)	1	

Code	Prevention precautionary statements	Hazard class	Hazard category	Conditions for use
(1)	(2)	(3)	(4)	(5)
P270	Do not eat, drink or smoke when using this	Acute toxicity – oral (chapter 3.1)	1, 2, 3, 4	
	product.	Acute toxicity – dermal (chapter 3.1)	1, 2	
		Reproductive toxicity – effects on or via lactation (chapter 3.7)	Additional category	
		Specific target organ toxicity, single exposure (chapter 3.8)	1, 2	
		Specific target organ toxicity, repeated exposure (chapter 3.9)	1	
P271	Use only outdoors or in a well-ventilated area.	Acute toxicity – inhalation (chapter 3.1)	1, 2, 3, 4	
		Specific target organ toxicity, single exposure; respiratory tract irritation (chapter 3.8)	3	
		Specific target organ toxicity, single exposure; narcotic effects (chapter 3.8)	3	
P272	Contaminated work clothing should not be allowed out of the workplace.	Skin sensitization (chapter 3.4)	1, 1A, 1B	
P273	Avoid release to the environment.	Hazardous to the aquatic environment, acute hazard (chapter 4.1)	1, 2, 3	- <i>if this is not the intended use.</i>
		Hazardous to the aquatic environment, long-term hazard (chapter 4.1)	1, 2, 3, 4	
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/	Explosives (chapter 2.1)	Unstable explosive and divisions 1.1, 1.2, 1.3, 1.4, 1.5	Manufacturer/supplier or the competent authority to specify the appropriate personal protective equipment.
		Flammable gases (chapter 2.2)	Pyrophoric gas	
		Flammable liquids (chapter 2.6)	1, 2, 3, 4	
		Flammable solids (chapter 2.7)	1, 2	
		Self-reactive substances and mixtures	Types A, B, C, D, E,	
		(chapter 2.8)	F	-
		Pyrophoric liquids (chapter 2.9)	1	-
		Pyrophoric solids (chapter 2.10)	1	-
		Self-heating substances and mixtures (chapter 2.11)	1, 2	
		Substances and mixtures which, in contact with water, emit flammable gases (chapter 2.12)	1, 2, 3	
		Oxidizing liquids (chapter 2.13)	1, 2, 3	
		Oxidizing solids (chapter 2.14)	1, 2, 3	

Code	Prevention precautionary statements	Hazard class	Hazard category	Conditions for use
(1)	(2)	(3)	(4)	(5)
P280 (suite)	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/	Organic peroxides (chapter 2.15)	Types A, B, C, D, E, F	Manufacturer/supplier or the competent authority to specify the appropriate personal protective equipment
()		Desensitized explosives (chapter 2.17)	1, 2, 3, 4	
		Acute toxicity – dermal (chapter 3.1)	1, 2, 3, 4	- Specify protective gloves/clothing. Manufacturer/supplier or the competent authority may further specify type of equipment where appropriate.
		Skin corrosion (chapter 3.2)	1A, 1B, 1C	 Specify protective gloves/clothing and eye/face protection. Manufacturer/supplier or the competent authority may further specify type of equipment where appropriate.
		Skin irritation (chapter 3.2)	2	– Specify protective gloves.
		Skin sensitization (chapter 3.4)	1, 1A, 1B	Manufacturer/supplier or the competent authority may further specify type of equipment where appropriate.
		Serious eye damage (chapter 3.3)	1	- Specify eye/face protection.
		Eye irritation (chapter 3.3)	2A	Manufacturer/supplier or the competent authority may further specify type of equipment where appropriate.
		Germ cell mutagenicity (chapter 3.5)	1A, 1B, 2	Manufacturer/supplier or the competent authority to
		Carcinogenicity (chapter 3.6)	1A, 1B, 2	specify the appropriate personal protective equipment.
		Reproductive toxicity (chapter 3.7)	1A, 1B, 2	
P282	Wear cold insulating gloves and either face shield or eye protection.	Gases under pressure (chapter 2.5)	Refrigerated liquefied gas	
P283	Wear fire resistant or flame retardant clothing.	Oxidizing liquids (chapter 2.13)	1	
		Oxidizing solids (chapter 2.14)	1	
P284	[In case of inadequate ventilation] wear	Acute toxicity, inhalation (chapter 3.1)	1, 2	– text in square brackets may be used if additional
	respiratory protection.	Respiratory sensitization (chapter 3.4)	1, 1A, 1B	information is provided with the chemical at the point of use that explains what type of ventilation would be adequate for safe use. Manufacturer/supplier or the competent authority to specify equipment.
P231 + P232	Handle and store contents under inert gas/ Protect from moisture.	Substances and mixtures which, in contact with water, emit flammable gases (chapter 2.12)	1, 2, 3	 <i>if the substance or mixture reacts readily with moisture in air.</i> Manufacturer/supplier or the competent authority to specify appropriate liquid or gas if "inert gas" is not appropriate.

Code	Response precautionary statements	Hazard class	Hazard category	Conditions for use
(1)	(2)	(3)	(4)	(5)
P301	IF SWALLOWED:	Acute toxicity, oral (chapter 3.1)	1, 2, 3, 4, 5	
		Skin corrosion (chapter 3.2)	1A, 1B, 1C	
		Aspiration hazard (chapter 3.10)	1, 2	
P302	IF ON SKIN:	Pyrophoric liquids (chapter 2.9)	1	
		Pyrophoric solids (chapter 2.10)	1	
		Substances and mixtures which, in contact with water, emit flammable gases (chapter 2.12)	1, 2	
		Acute toxicity, dermal (chapter 3.1)	1, 2, 3, 4, 5	
		Skin irritation (chapter 3.2)	2	
		Skin sensitization (chapter 3.4)	1, 1A, 1B	
P303	IF ON SKIN (or hair):	Flammable liquids (chapter 2.6)	1, 2, 3	
		Skin corrosion (chapter 3.2)	1A, 1B, 1C	
P304	IF INHALED:	Acute toxicity, inhalation (chapter 3.1)	1, 2, 3, 4, 5	
		Skin corrosion (chapter 3.2)	1A, 1B, 1C	
		Respiratory sensitization (chapter 3.4)	1, 1A, 1B	
		Specific target organ toxicity, single exposure; respiratory tract irritation (chapter 3.8)	3	
		Specific target organ toxicity, single exposure; narcotic effects (chapter 3.8)	3	
P305	IF IN EYES:	Skin corrosion (chapter 3.2)	1A, 1B, 1C	
		Serious eye damage (chapter 3.3)	1	
		Eye irritation (chapter 3.3)	2A, 2B	
P306	IF ON CLOTHING:	Oxidizing liquids (chapter 2.13)	1	
		Oxidizing solids (chapter 2.14)	1	
	· · · · · · · · · · · · · · · · · · ·			
P308	IF exposed or concerned:	Germ cell mutagenicity (chapter 3.5)	1A, 1B, 2	
		Carcinogenicity (chapter 3.6)	1A, 1B, 2	
		Reproductive toxicity (chapter 3.7)	1A, 1B, 2	
		Reproductive toxicity, effects on or via lactation (chapter 3.7)	Additional category	
		Specific target organ toxicity, single exposure (chapter 3.8)	1, 2	

Table A3.2.3: Codification of response precautionary statements

Code	Response precautionary statements	Hazard class	Hazard category	Conditions for use
(1)	(2)	(3)	(4)	(5)
P310	Immediately call a POISON CENTER/doctor/	Acute toxicity, oral (chapter 3.1)	1, 2, 3	Manufacturer/supplier or the competent
		Acute toxicity, dermal (chapter 3.1)	1, 2	authority to specify the appropriate source of
		Acute toxicity, inhalation (chapter 3.1)	1, 2	emergency medical advice.
		Skin corrosion (chapter 3.2)	1A, 1B, 1C	
		Serious eye damage (chapter 3.3)	1	
		Aspiration hazard (chapter 3.10)	1, 2	
P311	Call a POISON CENTER/doctor/	Acute toxicity, inhalation (chapter 3.1)	3	Manufacturer/supplier or the competent
		Respiratory sensitization (chapter 3.4)	1, 1A, 1B	authority to specify the appropriate source of
		Specific target organ toxicity, single exposure (chapter 3.8)	1, 2	emergency medical advice.
P312	Call a POISON CENTER/doctor/if you feel unwell.	Acute toxicity, oral (chapter 3.1)	4, 5	Manufacturer/supplier or the competent authority to specify the appropriate source of
		Acute toxicity, dermal (chapter 3.1)	3, 4, 5	emergency medical advice.
		Acute toxicity, inhalation (chapter 3.1)	4, 5	
		Specific target organ toxicity, single exposure; respiratory tract irritation (chapter 3.8)	3	
		Specific target organ toxicity, single exposure; narcotic effects (chapter 3.8)	3	
P313	Get medical advice/attention.	Skin irritation (chapter 3.2)	2, 3	Manufacturer/supplier or the competent
		Eye irritation (chapter 3.3)	2A, 2B	authority to select medical advice or attention as
		Skin sensitization (chapter 3.4)	1, 1A, 1B	appropriate.
		Germ cell mutagenicity (chapter 3.5)	1A, 1B, 2	
		Carcinogenicity (chapter 3.6)	1A, 1B, 2	
		Reproductive toxicity (chapter 3.7)	1A, 1B, 2	
		Reproductive toxicity, effects on or via lactation (chapter 3.7)	Additional category	
P314	Get medical advice/attention if you feel unwell.	Specific target organ toxicity, repeated exposure (chapter 3.9)	1, 2	Manufacturer/supplier or the competent authority to select medical advice or attention as appropriate.
P315	Get immediate medical advice/attention.	Gases under pressure (chapter 2.5)	Refrigerated liquefied gas	Manufacturer/supplier or the competent authority to select medical advice or attention as appropriate.
P320	Specific treatment is urgent (see on this label).	Acute toxicity, inhalation (chapter 3.1)	1, 2	 <i>if immediate administration of antidote is required.</i> Reference to supplemental first aid instruction.

Code	Response precautionary statements	Hazard class	Hazard category	Conditions for use
(1)	(2)	(3)	(4)	(5)
P321	Specific treatment (see on this label).	Acute toxicity, oral (chapter 3.1)	1, 2, 3	 if immediate administration of antidote is required. Reference to supplemental first aid instruction.
		Acute toxicity, dermal (chapter 3.1)	1, 2, 3, 4	 <i>if immediate measures such as specific cleansing agent is advised.</i> Reference to supplemental first aid instruction.
		Acute toxicity, inhalation (chapter 3.1)	3	<i>– if immediate specific measures are required.</i> Reference to supplemental first aid instruction.
		Skin corrosion (chapter 3.2)	1A, 1B, 1C	Reference to supplemental first aid instruction.
		Skin irritation (chapter 3.2)	2	anufacturer/supplier or the competent authority
		Skin sensitization (chapter 3.4)	1, 1A, 1B	may specify a cleansing agent if appropriate.
		Specific target organ toxicity, single exposure (chapter 3.8)	1	<i>– if immediate measures are required.</i> Reference to supplemental first aid instruction.
P330	Rinse mouth.	Acute toxicity, oral (chapter 3.1)	1, 2, 3, 4	
1 3 3 0	Kinse mouth.	Skin corrosion (chapter 3.2)	1, 2, 3, 4 1A, 1B, 1C	-
P331	Do NOT induce vomiting.	Skin corrosion (chapter 3.2) Skin corrosion (chapter 3.2)	1A, 1B, 1C	
1001	Do NOT induce volniting.	Aspiration hazard (chapter 3.10)	1, 2	-
P332	If skin irritation occurs:	Skin irritation (chapter 3.2)	2, 3	- may be omitted if P333 is given on the label.
P333	If skin irritation or rash occurs:	Skin sensitization (chapter 3.4)	1, 1A, 1B	
P334	Immerse in cool water [or wrap in wet bandages].	Pyrophoric liquids (chapter 2.9)	1	– text in square brackets to be used for
		Pyrophoric solids (chapter 2.10)	1	pyrophoric liquids and solids.
		Substances and mixtures which, in contact with water, emit flammable gases (chapter 2.12)	1,2	– use only "Immerse in cool water." Text in square brackets should not be used.
P335	Brush off loose particles from skin.	Pyrophoric solids (chapter 2.10)	1	
		Substances and mixtures which, in contact with	1, 2	
		water, emit flammable gases (chapter 2.12)		
P336	Thaw frosted parts with lukewarm water. Do not rub affected area.	Gases under pressure (chapter 2.5)	Refrigerated liquefied gas	
P337	If eye irritation persists:	Eye irritation (chapter 3.3)	2A, 2B	
P338	Remove contact lenses, if present and easy to do.	Skin corrosion (chapter 3.2)	1A, 1B, 1C	
	Continue rinsing.	Serious eye damage (chapter 3.3)	1	
		Eye irritation (chapter 3.3)	2A, 2B	

Code	Response precautionary statements	Hazard class	Hazard category	Conditions for use
(1)	(2)	(3)	(4)	(5)
P340	Remove person to fresh air and keep comfortable for breathing.	Acute toxicity, inhalation (chapter 3.1)	1, 2, 3, 4	
		Skin corrosion (chapter 3.2)	1A, 1B, 1C	_
		Respiratory sensitization (chapter 3.4)	1, 1A, 1B	_
		Specific target organ toxicity, single exposure; respiratory tract irritation (chapter 3.8)	3	
		Specific target organ toxicity, single exposure; narcotic effects (chapter 3.8)	3	
P342	If experiencing respiratory symptoms:	Respiratory sensitization (chapter 3.4)	1, 1A, 1B	
	- -			
P351	Rinse cautiously with water for several minutes.	Skin corrosion (chapter 3.2)	1A, 1B, 1C	
		Serious eye damage (chapter 3.3)	1	
		Eye irritation (chapter 3.3)	2A, 2B	
P352	Wash with plenty of water/	Acute toxicity, dermal (chapter 3.1)	1, 2, 3, 4	Manufacturer/supplier or the competent
		Skin irritation (chapter 3.2)	2	authority may specify a cleansing agent if appropriate, or may recommend an alternativ agent in exceptional cases if water is clearly inappropriate.
		Skin sensitization (chapter 3.4)	1, 1A, 1B	
P353	Rinse skin with water [or shower].	Flammable liquids (chapter 2.6)	1, 2, 3	- text in square brackets to be included where
		Skin corrosion (chapter 3.2)	1A, 1B, 1C	the manufacturer/supplier or the competent authority considers it appropriate for the specific chemical.
P360	Rinse immediately contaminated clothing and skin	Oxidizing liquids (chapter 2.13)	1	
1000	with plenty of water before removing clothes.	Oxidizing solids (chapter 2.14)	1	_
P361	Take off immediately all contaminated clothing.	Flammable liquids (chapter 2.6)	1, 2, 3	
		Acute toxicity, dermal (chapter 3.1)	1, 2, 3	
		Skin corrosion (chapter 3.2)	1A, 1B, 1C	_
P362	Take off contaminated clothing.	Acute toxicity, dermal (chapter 3.1)	4	
	g.	Skin irritation (chapter 3.2)	2	-
		Skin sensitization (chapter 3.4)	1, 1A, 1B	-
P363	Wash contaminated clothing before reuse.	Skin corrosion (chapter 3.2)	1A, 1B, 1C	
P364	And wash it before reuse.	Acute toxicity, dermal (chapter 3.1)	1, 2, 3, 4	
		Skin irritation (chapter 3.2)	2	-
		Skin sensitization (chapter 3.4)	1, 1A, 1B	-

Code	Response precautionary statements	Hazard class	Hazard category	Conditions for use
(1)	(2)	(3)	(4)	(5)
P370	In case of fire:	Explosives (chapter 2.1)	Unstable explosive and divisions 1.1, 1.2, 1.3, 1.4, 1.5	
		Oxidizing gases (chapter 2.4)	1	
		Flammable liquids (chapter 2.6)	1, 2, 3, 4	
		Flammable solids (chapter 2.7)	1, 2	
		Self-reactive substances and mixtures (chapter 2.8)	Types A, B, C, D, E, F	
		Pyrophoric liquids (chapter 2.9)	1	
		Pyrophoric solids (chapter 2.10)	1	
		Substances and mixtures which, in contact with water, emit flammable gases (chapter 2.12)	1, 2, 3	
		Oxidizing liquids (chapter 2.13)	1, 2, 3	
		Oxidizing solids (chapter 2.14)	1, 2, 3	
		Organic peroxides (chapter 2.15)	Types A, B, C. D, E, F	
		Desensitized explosives (chapter 2.17)	1, 2, 3	
P371	In case of major fire and large quantities:	Oxidizing liquids (chapter 2.13)	1	
		Oxidizing solids (chapter 2.14)	1	
		Desensitized explosives (chapter 2.17)	4	
P372	Explosion risk.	Explosives (chapter 2.1)	Unstable explosive and Divisions 1.1, 1.2, 1.3, and 1.5	
			Division 1.4	- except for explosives of division 1.4 (compatibility group S) in transport packaging.
		Self-reactive substances and mixtures (chapter 2.8)	Type A	
		Organic peroxides (chapter 2.15)	Type A	
P373	DO NOT fight fire when fire reaches explosives.	Explosives (chapter 2.1)	Unstable explosive and Divisions 1.1, 1.2, 1.3, and 1.5	
			Division 1.4	- except for explosives of division 1.4 (compatibility group S) in transport packaging.
		Self-reactive substances and mixtures (chapter 2.8)	Type A	_
		Organic peroxides (chapter 2.15)	Type A	

Code	Response precautionary statements	Hazard class	Hazard category	Conditions for use
(1)	(2)	(3)	(4)	(5)
P375	Fight fire remotely due to the risk of explosion.	Explosives (chapter 2.1)	Division 1.4	- for explosives of division 1.4 (compatibility group S) in transport packaging.
		Self-reactive substances and mixtures (chapter 2.8)	Type B	
		Oxidizing liquids (chapter 2.13)	1	
		Oxidizing solids (chapter 2.14)	1	
		Organic peroxides (chapter 2.15)	Type B	
		Desensitized explosives (chapter 2.17)	1, 2, 3, 4	
P376	Stop leak if safe to do so.	Oxidizing gases (chapter 2.4)	1	
P377	Leaking gas fire: Do not extinguish, unless leak can be stopped safely.	Flammable gases (chapter 2.2)	1A, 1B ,2	
P378	Use to extinguish.	Flammable liquids (chapter 2.6)	1, 2, 3, 4	– if water increases risk.
		Flammable solids (chapter 2.7)	1, 2	Manufacturer/supplier or the competent
		Self-reactive substances and mixtures (chapter 2.8)	Types B, C, D, E, F	authority to specify appropriate media.
		Pyrophoric liquids (chapter 2.9)	1	
		Pyrophoric solids (chapter 2.10)	1	
		Substances and mixtures which, in contact with water, emit flammable gases (chapter 2.12)	1, 2, 3	
		Oxidizing liquids (chapter 2.13)	1, 2, 3	
		Oxidizing solids (chapter 2.14)	1, 2, 3	
		Organic peroxides (chapter 2.15)	Types B, C, D, E, F	
P380	Evacuate area.	Explosives (chapter 2.1)	Unstable explosive and Divisions 1.1, 1.2, 1.3, 1.4, 1.5	
		Self-reactive substances and mixtures (chapter 2.8)	Types A, B	
		Oxidizing liquids (chapter 2.13)	1	
		Oxidizing solids (chapter 2.14)	1	
		Organic peroxides (chapter 2.15)	Types A, B	
		Desensitized explosives (chapter 2.17)	1, 2, 3, 4	
P381	In case of leakage, eliminate all ignition sources.	Flammable gases (chapter 2.2)	1A, 1B, 2	
P390	Absorb spillage to prevent material-damage.	Corrosive to metals (chapter 2.16)	1	
P391	Collect spillage.	Hazardous to the aquatic environment, acute hazard (chapter 4.1)	1	
		Hazardous to the aquatic environment, long-term hazard (chapter 4.1)	1, 2	

Code	Response precautionary statements	Hazard class	Hazard category	Conditions for use
(1)	(2)	(3)	(4)	(5)
P301	IF SWALLOWED: Immediately call a POISON	Acute toxicity, oral (chapter 3.1)	1, 2, 3	Manufacturer/supplier or the competent
+ P310	CENTER/doctor/	Aspiration hazard (chapter 3.10)	1, 2	authority to specify the appropriate source of emergency medical advice.
P301 + P312	IF SWALLOWED: Call a POISON CENTER/ doctor/if you feel unwell.	Acute toxicity, oral (chapter 3.1)	4, 5	Manufacturer/supplier or the competent authority to specify the appropriate source of emergency medical advice.
P302 + P334	IF ON SKIN: Immerse in cool water or wrap in wet bandages.	Pyrophoric liquids (chapter 2.9)	1	
P302	IF ON SKIN: Wash with plenty of water/	Acute toxicity, dermal (chapter 3.1)	1, 2, 3, 4, 5	Manufacturer/supplier or the competent
+		Skin irritation (chapter 3.2)	2	authority may specify a cleansing agent if
P352		Skin sensitization (chapter 3.4)	1, 1A, 1B	appropriate, or may recommend an alternative agent in exceptional cases if water is clearly inappropriate.
P304 + P312	IF INHALED: Call a POISON CENTER/doctor/if you feel unwell.	Acute toxicity, inhalation (chapter 3.1)	5	Manufacturer/supplier or the competent authority to specify the appropriate source of emergency medical advice.
P304	IF INHALED: Remove person to fresh air and keep	Acute toxicity, inhalation (chapter 3.1)	1, 2, 3, 4	
+	comfortable for breathing.	Skin corrosion (chapter 3.2)	1A, 1B, 1C	
P340		Respiratory sensitization (chapter 3.4)	1, 1A, 1B	
		Specific target organ toxicity, single exposure; respiratory tract irritation (chapter 3.8)	3	
		Specific target organ toxicity, single exposure; narcotic effects (chapter 3.8)	3	
P306	IF ON CLOTHING: Rinse immediately	Oxidizing liquids (chapter 2.13)	1	
+ P360	contaminated clothing and skin with plenty of water before removing clothes.	Oxidizing solids (chapter 2.14)	1	
P308 + P311	IF exposed or concerned: Call a POISON CENTER/doctor/	Specific target organ toxicity, single exposure (chapter 3.8)	1, 2	Manufacturer/supplier or the competent authority to specify the appropriate source of emergency medical advice.
P308	IF exposed or concerned: Get medical advice/	Germ cell mutagenicity (chapter 3.5)	1A, 1B, 2	Manufacturer/supplier or the competent
+	attention.	Carcinogenicity (chapter 3.6)	1A, 1B, 2	authority to select medical advice or attention as
P313		Reproductive toxicity (chapter 3.7)	1A, 1B, 2	appropriate.
		Reproductive toxicity, effects on or via lactation (chapter 3.7)	Additional category	
P332 +	If skin irritation occurs: Get medical advice/attention.	Skin irritation (chapter 3.2)	2, 3	- may be omitted when P333+P313 is given on the label.
P313				Manufacturer/supplier or the competent authority to select medical advice or attention as appropriate.

Code	Response precautionary statements	Hazard class	Hazard category	Conditions for use
(1)	(2)	(3)	(4)	(5)
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.	Skin sensitization (chapter 3.4)	1, 1A, 1B	Manufacturer/supplier or the competent authority to select medical advice or attention as appropriate.
P336 + P315	Thaw frosted parts with lukewarm water. Do not rub affected area. Get immediate medical advice/attention	Gases under pressure (chapter 2.5)	Refrigerated liquefied gas	Manufacturer/supplier or the competent authority to select medical advice or attention as appropriate.
P337 + P313	If eye irritation persists: Get medical advice/attention.	Eye irritation (chapter 3.3)	2A, 2B	Manufacturer/supplier or the competent authority to select medical advice or attention as appropriate.
P342 + P311	If experiencing respiratory symptoms: Call a POISON CENTER/doctor/	Respiratory sensitization (chapter 3.4)	1, 1A, 1B	Manufacturer/supplier or the competent authority to specify the appropriate source of emergency medical advice.
P361 + P364	Take off immediately all contaminated clothing and wash it before reuse.	Acute toxicity, dermal (chapter 3.1)	1, 2, 3	
P362	Take off contaminated clothing and wash it before	Acute toxicity, dermal (chapter 3.1)	4	
+	reuse.	Skin irritation (chapter 3.2)	2	
P364		Skin sensitization (chapter 3.4)	1, 1A, 1B	
P370 + P376	In case of fire: Stop leak if safe to do so.	Oxidizing gases (chapter 2.4)	1	
P370	In case of fire: Use to extinguish.	Flammable liquids (chapter 2.6)	1, 2, 3, 4	– if water increases risk.
+		Flammable solids (chapter 2.7)	1, 2	Manufacturer/supplier or the competent
P378		Self-reactive substances and mixtures (chapter 2.8)	Types C, D, E, F	authority to specify appropriate media.
		Pyrophoric liquids (chapter 2.9)	1	
		Pyrophoric solids (chapter 2.10)	1	
		Substances and mixtures which, in contact with water, emit flammable gases (chapter 2.12)	1, 2, 3	
		Oxidizing liquids (chapter 2.13)	1, 2, 3	
		Oxidizing solids (chapter 2.14)	1, 2, 3	
		Organic peroxides (chapter 2.15)	Types C, D, E, F	
P301 + P330 + P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.	Skin corrosion (chapter 3.2)	1A, 1B, 1C	
P302 +	IF ON SKIN: Brush off loose particles from skin. Immerse in cool water [or wrap in wet bandages].	Pyrophoric solids (chapter 2.10)	1	– text in square brackets to be used for pyrophoric solids

Code	Response precautionary statements	Hazard class	Hazard category	Conditions for use
(1)	(2)	(3)	(4)	(5)
P335 + P334		Substances and mixtures which, in contact with water, emit flammable gases (chapter 2.12)	1, 2	 use only "Immerse in cool water." Text in square brackets should not be used.
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].	Flammable liquids (chapter 2.6) Skin corrosion (chapter 3.2)	1, 2, 3 1A, 1B, 1C	- text in square brackets to be included where the manufacturer/supplier or the competent authority considers it appropriate for the specific chemical.
P305	IF IN EYES: Rinse cautiously with water for several	Skin corrosion (chapter 3.2)	1A, 1B, 1C	
+	minutes. Remove contact lenses, if present and easy	Serious eye damage (chapter 3.3)	1	
P351 + P338	to do. Continue rinsing.	Eye irritation (chapter 3.3)	2A, 2B	
P370 +	In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion.	Explosives (chapter 2.1)	Division 1.4	– for explosives of division 1.4 (compatibility group S) in transport packaging
P380 + P375		Desensitized explosives (chapter 2.17)	1, 2, 3	
P371	In case of major fire and large quantities: Evacuate	Oxidizing liquids (chapter 2.13)	1	
+	area. Fight fire remotely due to the risk of explosion.	Oxidizing solids (chapter 2.14)	1	
P380 + P375		Desensitized explosives (chapter 2.17)	4	
P370 + P372	In case of fire: Explosion risk. Evacuate area. DO NOT fight fire when fire reaches explosives.	Explosives (chapter 2.1)	Unstable explosives and divisions 1.1, 1.2, 1.3, 1.5	
+ P380			Division 1.4	– except for explosives of division 1.4 (compatibility group S) in transport packaging.
+ P373		Self-reactive substances and mixtures (chapter 2.8)	Type A	
1373		Organic peroxides (chapter 2.15)	Type A	
P370	In case of fire: Evacuate area. Fight fire remotely	Self-reactive substances and mixtures (chapter 2.8)	Type B	- text in square brackets to be used if water
+ P380 + P375	due to the risk of explosion. [Useto extinguish].	Organic peroxides (chapter 2.15)	Туре В	<i>increases risk.</i> Manufacturer/supplier or the competent authority to specify appropriate media.
[+ P378]				

Code	Storage precautionary statements	Hazard class	Hazard category	Conditions for use
(1)	(2)	(3)	(4)	(5)
P401	Store in accordance with	Explosives (chapter 2.1)	Unstable explosives and Divisions 1.1, 1.2, 1.3, 1.4, 1.5	Manufacturer/supplier or the competent authority to specify local/regional/ national/international regulations as
		Desensitized explosives (chapter 2.17)	1, 2, 3, 4	applicable.
P402	Store in a dry place.	Substances and mixtures which, in contact with water, emit flammable gases (chapter 2.12)	1, 2, 3	
P403	Store in a well-ventilated place.	Flammable gases (chapter 2.2)	1A, 1B, 2	
		Oxidizing gases (chapter 2.4)	1	
		Gases under pressure (chapter 2.5)	Compressed gas	
			Liquefied gas	
			Refrigerated liquefied gas	
			Dissolved gas	
		Flammable liquids (chapter 2.6)	1, 2, 3, 4	– for flammable liquids Category 1 and other flammable liquids that are volatile and may generate an explosive atmosphere.
		Self-reactive substances and mixtures (chapter 2.8)	Types A, B, C, D, E, F	- except for temperature controlled self- reactive substances and mixtures or organic
		Organic peroxides (chapter 2.15)	Types A, B, C, D, E, F	peroxides because condensation and consequent freezing may take place.
		Acute toxicity, inhalation (chapter 3.1)	1, 2, 3	– if the chemical is volatile and may
		Specific target organ toxicity, single exposure; respiratory tract irritation (chapter 3.8)	3	generate a hazardous atmosphere.
		Specific target organ toxicity, single exposure; narcotic effects (chapter 3.8)	3	
P404	Store in a closed container.	Substances and mixtures which, in contact with water, emit flammable gases (chapter 2.12)	1, 2, 3	

Table A3.2.4: Codification of storage precautionary statements

Code	Storage precautionary statements	Hazard class	Hazard category	Conditions for use
(1)	(2)	(3)	(4)	(5)
P405	Store locked up.	Acute toxicity, oral (chapter 3.1)	1, 2, 3	
		Acute toxicity, dermal (chapter 3.1)	1, 2, 3	
		Acute toxicity, inhalation (chapter 3.1)	1, 2, 3	
		Skin corrosion (chapter 3.2)	1A, 1B, 1C	
		Germ cell mutagenicity (chapter 3.5)	1A, 1B, 2	
		Carcinogenicity (chapter 3.6)	1A, 1B, 2	
		Reproductive toxicity (chapter 3.7)	1A, 1B, 2	
		Specific target organ toxicity, single exposure (chapter 3.8)	1, 2	
		Specific target organ toxicity, single exposure; respiratory tract irritation (chapter 3.8)	3	
		Specific target organ toxicity, single exposure; narcotic effects (chapter 3.8)	3	
		Aspiration hazard (chapter 3.10)	1, 2	
P406	Store in a corrosion resistant/container with a resistant inner liner.	Corrosive to metals (chapter 2.16)	1	 <i>may be omitted if P234 is given on the label</i> Manufacturer/supplier or the competent authority to specify other compatible materials.
P407	Maintain air gap between stacks or pallets.	Self-heating substances and mixtures (chapter 2.11)	1, 2	
	1			
P410	Protect from sunlight.	Aerosols (chapter 2.3)	1, 2, 3	
		Gases under pressure (chapter 2.5)	Compressed gas Liquefied gas Dissolved gas	 may be omitted for gases filled in transportable gas cylinders in accordance with packing instruction P200 of the UN Recommendations on the Transport of Dangerous Goods, Model Regulations, unless those gases are subject to (slow) decomposition or polymerisation, or the competent authority provides otherwise.
		Self-heating substances and mixtures (chapter 2.11)	1, 2	
		Organic peroxides (chapter 2.15)	Types A, B, C, D, E, F	

Code	Storage precautionary statements	Hazard class	Hazard category	Conditions for use
(1)	(2)	(3)	(4)	(5)
P411	Store at temperatures not exceeding°C/°F.	Self-reactive substances and mixtures (chapter 2.8)	Types A, B, C, D, E, F	- if temperature control is required (according to section 2.8.2.3 or 2.15.2.3 of
		Organic peroxides (chapter 2.15)	Types A, B, C, D, E, F	<i>the GHS) or if otherwise deemed necessary</i> Manufacturer/supplier or the competent authority to specify temperature using applicable temperature scale.
P412	Do not expose to temperatures exceeding 50 °C/ 122 °F.	Aerosols (chapter 2.3)	1, 2, 3	Manufacturer/supplier or the competent authority to use applicable temperature scale.
P413	Store bulk masses greater than kg/lbs at temperatures not exceeding°C/°F.	Self-heating substances and mixtures (chapter 2.11)	1, 2	Manufacturer/supplier or the competent authority to specify mass and temperature using applicable scale.
P420	Store separately.	Self-reactive substances and mixtures (chapter 2.8)	Types A, B, C, D, E, F	
		Self-heating substances and mixtures (chapter 2.11)	1, 2	
		Oxidizing liquids (chapter 2.13)	1	
		Oxidizing solids (chapter 2.14)	1	
		Organic peroxides (chapter 2.15)	Types A, B, C, D, E, F	
P402 + P404	Store in a dry place. Store in a closed container.	Substances and mixtures which, in contact with water, emit flammable gases (chapter 2.12)	1, 2, 3	
P403	Store in a well-ventilated place. Keep container tightly closed.	Acute toxicity, inhalation (chapter 3.1)	1, 2, 3	– if the chemical is volatile and may
+ P233		Specific target organ toxicity, single exposure; respiratory tract irritation (chapter 3.8)	3	generate a hazardous atmosphere.
		Specific target organ toxicity, single exposure; narcotic effects (chapter 3.8)	3	
P403 + P235	Store in a well-ventilated place. Keep cool.	Flammable liquids (chapter 2.6)	1, 2, 3	– for flammable liquids Category 1 and other flammable liquids that are volatile and may generate an explosive atmosphere.

Code	Storage precautionary statements	Hazard class	Hazard category	Conditions for use
(1)	(2)	(3)	(4)	(5)
P410 + P403	Protect from sunlight. Store in a well-ventilated place.	Gases under pressure (chapter 2.5)	Compressed gas Liquefied gas Dissolved gas	- P410 may be omitted for gases filled in transportable gas cylinders in accordance with packing instruction P200 of the UN Recommendations on the Transport of Dangerous Goods, Model Regulations, unless those gases are subject to (slow) decomposition or polymerisation, or the competent authority provides otherwise.
P410 + P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.	Aerosols (chapter 2.3)	1, 2, 3	Manufacturer/supplier or the competent authority to use applicable temperature scale.

Table A3.2.5: Codification of disposal precautionary statements

Code	Disposal precautionary statements	Hazard class	Hazard category	Conditions for use
(1)	(2)	(3)	(4)	(5)
P501	Dispose of contents/container to	Flammable liquids (chapter 2.6)	1, 2, 3, 4	in accordance with local/regional/
		Self-reactive substances and mixtures (chapter 2.8)	Types A, B, C, D, E, F	national/international regulation (to be specified).
		Substances and mixtures which, in contact with water, emit flammable gases (chapter 2.12)	1, 2, 3	Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or
		Oxidizing liquids (chapter 2.13)	1, 2, 3	both.
		Oxidizing solids (chapter 2.14)	1, 2, 3	
		Organic peroxides (chapter 2.15)	Types A, B, C, D, E, F	
		Desensitized explosives (chapter 2.17)	1, 2, 3, 4	
		Acute toxicity, oral (chapter 3.1)	1, 2, 3, 4	
		Acute toxicity, dermal (chapter 3.1)	1, 2, 3, 4	
		Acute toxicity, inhalation (chapter 3.1)	1, 2, 3	

Code	Disposal precautionary statements	Hazard class	Hazard category	Conditions for use
(1)	(2)	(3)	(4)	(5)
P501		Skin corrosion (chapter 3.2)	1A, 1B, 1C	in accordance with local/regional/
(cont'd)		Respiratory sensitization (chapter 3.4)	1, 1A, 1B	national/international regulation (to be
		Skin sensitization (chapter 3.4)	1, 1A, 1B	specified). Manufacturer/supplier or the competent
		Germ cell mutagenicity (chapter 3.5)	1A, 1B, 2	authority to specify whether disposal
		Carcinogenicity (chapter 3.6)	1A, 1B, 2	requirements apply to contents, container or
		Reproductive toxicity (chapter 3.7)	1A, 1B, 2	both.
		Specific target organ toxicity, single exposure (chapter 3.8)	1, 2	
		Specific target organ toxicity, single exposure; respiratory tract irritation (chapter 3.8)	3	
		Specific target organ toxicity, single exposure; narcotic effects (chapter 3.8)	3	
		Specific target organ toxicity, repeated exposure (chapter 3.9)	1, 2	
		Aspiration hazard (chapter 3.10)	1, 2	
		Hazardous to the aquatic environment, acute hazard (chapter 4.1)	1, 2, 3	
		Hazardous to the aquatic environment, long-term hazard (chapter 4.1)	1, 2, 3, 4	
P502	Refer to manufacturer or supplier for information on recovery or recycling.	Hazardous to the ozone layer (chapter 4.2)	1	
P503	Refer to manufacturer/supplier for information on disposal/recovery/recycling.	Explosives (chapter 2.1)	Unstable explosives and Divisions 1.1, 1.2, 1.3, 1.4, 1.5	Manufacturer/supplier or the competent authority to specify appropriate source of information in accordance with local/regional/national/international regulations as applicable

Section 3

USE OF PRECAUTIONARY STATEMENTS

A3.3.1 Introduction

A3.3.1.1 This section provides guidance on the use of precautionary statements consistent with the GHS, including advice on the selection of appropriate statements for each GHS hazard class and category. It will be subject to further refinement and development over time though the overall approach set out below will remain.

A3.3.1.2 Precautionary statements should, as an important part of hazard communication, appear on GHS labels, generally along with the GHS hazard communication elements (pictograms, signal words and hazard statements). Additional supplemental information, such as directions for use, may also be provided at the discretion of the manufacturer/supplier and/or competent authority (see Chapter 1.2 and Chapter 1.4, para. 1.4.6.3). For some specific chemicals, supplementary first aid, treatment measures or specific antidotes or cleansing materials may be required. Poisons Centres and/or medical practitioners or specialist advice should be sought in such situations and included on labels.

A3.3.1.3 The starting point for assigning precautionary statements is the hazard classification of the substance or mixture. The system of classifying hazards in the GHS is based on the intrinsic properties of the substances or mixtures involved (see 1.3.2.2.1). In some systems, however, labelling may not be required for chronic hazards on consumer product if information shows that the respective risks can be excluded under conditions of normal handling, normal use or foreseeable misuse (see Annex 5). If certain hazard statements are not required then the corresponding precautionary statements are also not necessary (see A5.1.1).

A3.3.1.4 The guidance for assigning the phrases in this section has been developed to provide the essential minimum phrases linking precautionary statements with relevant GHS hazard classification criteria and type of hazard.

A3.3.1.5 Existing precautionary statements have been used to the maximum extent as the basis for the development of this section. These existing systems have included the IPCS International Chemical Safety Card (ICSC) Compilers Guide, the American National Standards (ANSI Z129.1), the EU classification and labelling directives, the Emergency Response Guidebook (ERG 2004), and the Pesticide Label Review Manual of the Environmental Protection Agency (EPA) of the United States of America.

A3.3.1.6 The understanding and following of precautionary label information, specific safety guidelines, and the safety data sheet for each product before use are part of occupational health and safety procedures. Consistent use of precautionary statements will reinforce safe handling procedures and will enable the key concepts and approaches to be emphasized in workplace training and education activities.

A3.3.1.7 In order to correctly implement precautionary measures concerning prevention, response, storage and disposal, it is also necessary to have information on the composition of products at hand, so that information shown on the container, label and safety data sheet can be taken into account when asking for further specialist advice.

A3.3.1.8 To protect people with different reading abilities, it might be useful to include both precautionary pictograms and precautionary statements in order to convey information in more than one way (see 1.4.4.1 (a)). It should be noted, however, that the protective effect of pictograms is limited and the examples in this annex do not cover all precautionary aspects to be addressed. While pictograms can be useful, they can be misinterpreted and are not a substitute for training.

A3.3.2 Flexibility in the use of precautionary statements

A3.3.2.1 Omission of precautionary statements where the advice is not relevant

Subject to any requirements of competent authorities, those responsible for labelling may decide to omit other precautionary statements for a hazard class and category where the information is clearly not appropriate or is adequately addressed by other information on the label, taking into account the nature of the user (e.g. consumer, employers and workers), the quantity supplied, and the intended and foreseeable circumstances of use. Where a decision is made to omit a precautionary statement the supplier of the substance or mixture should be able to demonstrate that

the precautionary statement is not appropriate for the intended and foreseeable use, including potential emergency situations.

A3.3.2.2 Combination or consolidation of precautionary statements

A3.3.2.2.1 To provide flexibility in the application of precautionary phrases, combinations or consolidations of statements are encouraged to save label space and improve readability. The matrix and the Tables in Section 2 of Annex 3 include a number of combined precautionary statements. However, these are only examples and those responsible for labelling should further combine and consolidate phrases where this contributes to clarity and comprehensibility of label information.

A3.3.2.2.2 Combination of precautionary statements can also be useful for different types of hazard where the precautionary behaviour is similar. Examples are P370 + P372 + P380 "In case of fire: Explosion risk. Evacuate area" and P210 + P403 "Keep away from heat, sparks and open flame and store in a cool well ventilated place".

A3.3.2.3 *Variations of text not affecting the safety message*

A3.3.2.3.1 Subject to any requirements of competent authorities, the precautionary statements that appear on labels or in safety data sheets may incorporate minor textual variations from those set out in the GHS where these variations assist in communicating safety information and the safety advice is not diluted or compromised. These may include spelling variations, synonyms or other equivalent terms appropriate to the region where the product is supplied and used.

A3.3.2.3.2 In all cases, clear plain language is essential to convey information on precautionary behaviour. Furthermore, to ensure clarity of safety messages any variations should be applied consistently on the label and in the safety data sheet.

A3.3.2.4 *Application of precautionary statements concerning medical response*

A3.3.2.4.1 Where a substance or mixture is classified for a number of health hazards, this may trigger multiple precautionary statements relating to medical response i.e. calling a poison center/doctor/... (series P310-P312) and getting medical advice/attention (series P313-315). Usually, the label need only include one precautionary statement reflecting the response at the highest level with the greatest urgency, which should always be combined with at least one route of exposure or symptom ("IF" statement).

NOTE: This does not apply to P314 "Get medical advice/attention if you feel unwell" nor P315 "Get immediate medical/advice attention" which are not combined with a separate "IF" statement and should appear without prioritisation.

A3.3.2.4.2 In general, the following principles should be applied:

- (a) Where the classification of a substance or mixture triggers several different precautionary statements a system of prioritisation should be applied. P310 "Immediately call a POISON CENTER/doctor/...", should be prioritised over P311-P313; P311 "Call a POISON CENTER/doctor/..." over P312 and P313; and where only P312 "Call a POISON CENTER/doctor/...if you feel unwell" and P313 "Get medical advice/attention" are triggered, P311 "Call a POISON CENTER/doctor/..." should be used;
- (b) Routes of exposure, including P308 "IF exposed or concerned", may be combined when triggered with a medical response statement. If the response statement is triggered with three or more routes of exposure then P308 may be used instead. However, relevant "IF" statements describing symptoms (e.g. P332, P333, P337, P342) should be included in full. If a route of exposure is triggered multiple times it should only be included once.

For example:

• if P301 and P305 "IF SWALLOWED:" and "IF IN EYES:" are triggered with P313 "Get medical advice/attention" and P312 "Call a POISON CENTER/doctor/...if you feel unwell", then P301 + P305 + P311 "IF SWALLOWED OR IN EYES: Call a POISON CENTER/doctor/..." should appear.

- if P304, P302, P301 and P333 "IF INHALED:", "IF ON SKIN:", "IF SWALLOWED:" and "If skin irritation or rash occurs:", are triggered with P310 "Immediately call a POISON CENTER/doctor/...", and P311 "Call a POISON CENTER/doctor/...", then P308 + P332 + P310 "IF exposed or concerned or if skin irritation or rash occurs: Immediately call a POISON CENTER/doctor/..." should appear.
- if P305 and P302 "IF IN EYES:" and "IF ON SKIN" are triggered with P310 "Immediately call a POISON CENTER/doctor/...", P313 "Get medical advice/attention", and P314 "Get medical advice/attention if you feel unwell", then P305 + P302 + P310 "IF IN EYES OR ON SKIN: Immediately call a POISON CENTER/doctor/..." and P314 "Get medical advice/attention if you feel unwell" should appear separately.

A3.3.3 General precautionary measures

A3.3.3.1 General precautionary measures should be adopted for all substances and mixtures which are classified as hazardous to human health or the environment. To this end, the needs of, and the information sources available to two groups of users should be taken into account: consumers and employers/workers.

A3.3.3.2 In addition to the appropriate precautionary statements in the matrix, taking into account the guidance in this section, the general precautionary statements laid out in Table A3.2.1 are appropriate for consumers and should also appear on GHS labels.

A3.3.4 Matrix of precautionary statements by hazard class/category

A3.3.4.1 This section sets out a matrix listing the recommended precautionary statements for each hazard class and hazard category of the GHS by type of precautionary statement (see A3.2.2.1). The matrix guides the selection of appropriate precautionary statements, and includes elements for all categories of precautionary action. All specific elements relating to particular hazard classes should be used. In addition, general precautionary statements not linked to a certain hazard class or category should also be used where relevant (see A3.3.3).

A3.3.4.2 The tables making up the matrix show the core part of the precautionary statements in bold print. This is the text, except as otherwise specified, that should appear on the label. However, it is not necessary to insist on identical sets of words in all situations.

A3.3.4.3 Text in italics that starts with "-if" or "-specify" is intended to be an explanatory conditional note for the application of the precautionary statements and is not intended to appear on the label.

A3.3.4.4 When a forward slash or diagonal mark [/] appears in a precautionary statement text, it indicates that a choice needs to be made between the phrases they separate. In such cases, the manufacturer or supplier can choose or competent authorities may prescribe one or more appropriate phrase(s). For example, "Wear protective gloves/protective clothing/eye protection/face protection" could read "Wear eye protection" or "Wear eye and face protection".

A3.3.4.5 When three full stops [...] appear in a precautionary statement text, they indicate that all applicable conditions are not listed. In such cases the manufacturer or supplier can choose, or the competent authorities may prescribe the other conditions to be specified. For example, in the statement "Use explosion-proof [electrical/ventilating/lighting/...] equipment", the use of "..." indicates that other equipment may need to be specified.

A3.3.4.6 In the majority of cases, the recommended precautionary statements are independent, e.g. the phrases for explosive hazard do not modify those related to certain health hazards and products that are classified for both hazard classes should bear appropriate precautionary statements for both.

A3.3.5 Matrix of precautionary statements by hazard class/category

A3.3.5.1 This matrix lists the recommended precautionary statements for each hazard class and hazard category of the GHS by type of precautionary statement (see A3.2.2.1) except for general precautionary statements. In each case the precautionary statement has the applicable code on the line immediately above.

EXPLOSIVES

(Chapter 2.1)

	1.			
Hazard category	Symbol	 Signal word 	Hazard statement	
Unstable explosive	Exploding bomb	Danger	H200 Unstable explosive	

Precautionary statements					
Prevention	Response	Storage	Disposal		
 P201 Obtain special instructions before use. P250 Do not subject to grinding/shock/friction/ <i>- if the explosive is mechanically sensitive.</i> Manufacturer/supplier or the competent authority to specify applicable rough handling. P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/ Manufacturer/supplier or the competent authority to specify the appropriate personal protective equipment. 	P370 + P372 + P380 + P373 In case of fire: Explosion risk. Evacuate area. DO NOT fight fire when fire reaches explosives.	P401 Store in accordance with Manufacturer/supplier or the competent authority to specify local/regional/ national/international regulations as applicable.	P503 Refer to manufacturer/supplier/for information on disposal/recovery/recycling. Manufacturer/supplier or the competent authority to specify appropriate source of information in accordance with local/regional/national/international regulations as applicable.		

EXPLOSIVES

(Chapter 2.1)

Hazard category	Symbol	Signal word	Hazard statement
Division 1.1	Exploding bomb	Danger	H201 Explosive; mass explosion hazard
Division 1.2	Exploding bomb	Danger	H202 Explosive; severe projection hazard
Division 1.3	Exploding bomb	Danger	H203 Explosive; fire, blast or projection hazard
Division 1.5	No symbol	Danger	H205 May mass explode in fire

Precautionary statements

Prevention	Response	Storage	Disposal
P210	P370 + P372 + P380 + P373	P401	P503
Keep away from heat, hot surfaces, sparks, open flames and	In case of fire: Explosion risk.	Store in accordance with	Refer to manufacturer/supplier/for
other ignition sources. No smoking. P230 Keep wetted with – 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). Manufacturer/supplier or the competent authority to specify	Evacuate area. DO NOT fight fire when fire reaches explosives.	Manufacturer/supplier or the competent authority to specify local/regional/national/international regulations as applicable.	information on disposal/recovery/recycling Manufacturer/supplier or the competent authority to specify appropriate source of information in accordance with local/regional/national/international regulations as applicable.
appropriate material. P234			
Keep only in original packaging.			
P240			
Ground and bond container and receiving equipment. – <i>if the explosive is electrostatically sensitive.</i>			
P250 Do not subject to grinding/shock/friction/ - <i>if the explosive is mechanically sensitive.</i> Manufacturer/supplier or the competent authority to specify applicable rough handling.			
P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/ Manufacturer/supplier or the competent authority to specify the appropriate personal protective equipment.			

EXPLOSIVES

(Chapter 2.1)

Hazard category	Symbol
Division 1.4	Explodin



Signal word Warning Hazard statement

H204 Fire or projection hazard

Precautionary statements					
Prevention	Response	Storage	Disposal		
 P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P234 Keep only in original packaging. P240 Ground and bond container and receiving equipment. <i>if the explosive is electrostatically sensitive.</i> P250 Do not subject to grinding/shock/friction/ <i>if the explosive is mechanically sensitive.</i> Manufacturer/supplier or the competent authority to specify applicable rough handling. P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/ Manufacturer/supplier or the competent authority to specify the appropriate personal protective equipment. 	P370 + P372 + P380 + P373 In case of fire: Explosion risk. Evacuate area. DO NOT fight fire when fire reaches explosives. – except for explosives of division 1.4 (compatibility group S) in transport packaging. P370 + P380 + P375 In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion. – for explosives of division 1.4 (compatibility group S) in transport packaging.	P401 Store in accordance with Manufacturer/supplier or the competent authority to specify local/regional/ national/international regulations as applicable.	P503 Refer to manufacturer/supplier/for information on disposal/recovery/recycling Manufacturer/supplier or the competent authority to specify appropriate source of information in accordance with local/regional/national/international regulations as applicable.		

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FLAMMABLE GASES

(Chapter 2.2)

Hazard category	Symbol	Signal word	Hazard	statement
1A	Flame	Danger	H220	Extremely flammable gas
1B	Flame	Danger Danger	H221	Flammable gas
2	No symbol	Warning	H221	Flammable gas
Precautionary statements				

1
ω
2
1

Precautionary statements				
Prevention Response		Storage	Disposal	
P210P377Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.P377Leaking gas fire: Do not extinguish, unless leak can be stopped safely.		P403 Store in a well-ventilated place.		
	P381 In case of leakage, eliminate all ignition sources.			

FLAMMABLE GASES

(CHAPTER 2.2)

(PYROPHORIC GASES)

Hazard category	Symbol	Signal word	Hazar	d statement
1A, Pyrophoric gas	Flame	Danger	H220	Extremely flammable gas
			H232	May ignite spontaneously if exposed to air
Dresoutionary statements				

Precautionary statements					
Prevention	Response	Storage	Disposal		
 P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P222 Do not allow contact with air. <i>if emphasis of the hazard statement is deemed necessary.</i> P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/ Manufacturer/supplier or the competent authority to specify the appropriate personal protective equipment. 	P377 Leaking gas fire: Do not extinguish, unless leak can be stopped safely. P381 In case of leakage, eliminate all ignition sources.	P403 Store in a well-ventilated place.			

Note: This table lists only precautionary statements that are assigned due to the flammability and the pyrophoricity of the gas. For other precautionary statements that are assigned based on chemical instability, see the respective table for chemically unstable gases A and B.

FLAMMABLE GASES

(Chapter 2.2)

(CHEMICALLY UNSTABLE GASES)

Hazard category	Symbol	Signal word	Hazard statement
1A, chemically unstable gas A	Flame	Danger	H220 Extremely flammable gasH230 May react explosively even in the absence of air
1A, chemically unstable gas B	Flame	Danger	H220 Extremely flammable gasH231 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.	P377 Leaking gas fire: Do not extinguish, unless leak can be stopped safely.	P403 Store in a well-ventilated place.	
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.	P381 In case of leakage, eliminate all ignition sources.		

Note: This table lists only the precautionary statement that is assigned due to the flammability and the chemical instability of the gas. For the other precautionary statements that are assigned based on the pyrophoricity see the respective table for pyrophoric gas.

AEROSOLS

(Chapter 2.3)

Hazard category	Symbol	Signal word	Hazard statement
1	Flame	Danger	H222 Extremely flammable aerosolH229 Pressurized container: may burst if heated
2	Flame S	Warning	H223 Flammable aerosolH229 Pressurized container: may burst if heated

	Precautionary statements				
Prevention	Response	Storage	Disposal		
 P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P211 Do not spray on an open flame or other ignition source. 		P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Manufacturer/supplier or the competent authority to use applicable temperature scale.			
P251 Do not pierce or burn, even after use.					

AEROSOLS

(Chapter 2.3)

Hazard category 3	Symbol No symbol	Signal word Warning	Hazard statement H229 Pressurized container: may burst i	if heated
		Precauti	onary statements	
Preven	ition	Response	Storage	Disposal
P210 Keep away from heat, he open flames and other ig smoking. P251 Do not pierce or burn, er	nition sources. No		P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Manufacturer/supplier or the competent authority to use applicable temperature scale.	

OXIDIZING GASES

(Chapter 2.4)

Hazard category	
1	

Symbol Flame over circle



Hazard statement

H270 May cause or intensify fire; oxidizer

Precautionary statements				
Prevention	Disposal			
P220 Keep away from clothing and other combustible materials. P244 Keep valves and fittings free from oil and grease.	P370 + P376 In case of fire: Stop leak if safe to do so.	P403 Store in a well-ventilated place.		

GASES UNDER PRESSURE

(Chapter 2.5)

Hazard category	Symbol	Signal word	Hazard statement
Compressed gas	Gas cylinder	Warning	H280 Contains gas under pressure; may explode if heated
Liquefied gas	Gas cylinder	Warning	H280 Contains gas under pressure; may explode if heated
Dissolved gas	Gas cylinder	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 Recommendations on the Transport of Dangerous Goods, Model Regulations, unless those gases are subject to (slow) decomposition or polymerisation, or the competent authority provides otherwise.	

GASES UNDER PRESSURE

(Chapter 2.5)

Hazard category	Symbol
Refrigerated liquefied gas	Gas cylind



Signal word Warning Hazard statement

H281 Contains refrigerated gas; may cause cryogenic burns or injury

Precautionary statements			
Prevention	Disposal		
Prevention Response P282 P336 + P315 Wear cold insulating gloves and either face shield or eye protection. Pailor Pailor Do not rub affected area. Get immediate medical advice/attention. Manufacturer/supplier or the competent authority to select medical advice or attention as appropriate.		P403 Store in a well-ventilated place.	

FLAMMABLE LIQUIDS

(Chapter 2.6)

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

Precautionary statements				
Prevention	Response	Storage	Disposal	
 P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P233 Keep container tightly closed. <i>if the liquid is volatile and may generate an explosive atmosphere</i>. P240 Ground and bond container and receiving equipment. <i>if the liquid is volatile and may generate an explosive atmosphere</i>. P241 Use explosion-proof [electrical/ventilating/lighting/] equipment. <i>if the liquid is volatile and may generate an explosive atmosphere</i>. P241 Use explosion-proof [electrical/ventilating/lighting/] equipment. <i>if the liquid is volatile and may generate an explosive atmosphere</i>. <i>text in square brackets may be used to specify specific electrical, ventilating</i>, lighting or other equipment if necessary and as appropriate. <i>precautionary statement may be omitted where local or national legislation introduces more specific provisions.</i>. P242 Use non-sparking tools. <i>if the liquid is volatile and may generate an explosive atmosphere and if the minimum ignition energy is very low.</i> (<i>This applies to substances and mixtures where the minimum ignition energy is very low.</i> (<i>This applies to substances and mixtures where the minimum ignition energy is <0.1mJ, e.g. carbon disulphide</i>). P243 Take action to prevent static discharges. <i>if the liquid is volatile and may generate an explosive atmosphere</i>. <i>may be omitted where local or national legislation introduces more specific provisions</i>. P243 Take action to prevent static discharges. <i>if the liquid is volatile and may generate an explosive atmosphere</i>. <i>may be omitted where local or national legislation introduces more specific provisions</i>. P280 Wear protective gloves/protective clothing/eye protection/face pro	P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. - text in square brackets to be included where the manufacturer/supplier or the competent authority considers it appropriate for the specific chemical. P370 + P378 In case of fire: Use to extinguish. - if water increases risk. Manufacturer/supplier or the competent authority to specify appropriate media.	P403 + P235 Store in a well-ventilated place. Keep cool. <i>– for flammable liquids</i> <i>Category 1 and other</i> <i>flammable liquids that are</i> <i>volatile and may generate</i> <i>an explosive atmosphere.</i>	P501 Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified). Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.	

FLAMMABLE LIQUIDS

(Chapter 2.6)

Hazard category	Symbol	Signal word Ha	zard statement	
4	No symbol	Warning H22	27 Combustible liquid	
		Precautionary statemen	ts	
	Prevention	Response	Storage	Disposal
and other ignition sour P280 Wear protective gloves protection/face protect Manufacturer/supplier of	hot surfaces, sparks, open flames rces. No smoking. s/protective clothing/eye ion/hearing protection/ or the competent authority to personal protective equipment.	 P370 + P378 In case of fire: Use to extinguish. <i>if water increases risk.</i> Manufacturer/supplier or the competent authority to specify appropriate media. 	P403 Store in a well-ventilated place. – for flammable liquids Category 1 and other flammable liquids that are volatile and may generate an explosive atmosphere.	P501 Dispose of contents/container to in accordance with local/regional/ national/international regulations (to be specified). Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.

FLAMMABLE SOLIDS

(CHAPTER 2.7)

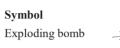
Hazard category	Symbol	Signal word	Hazard statement	
1	Flame	Danger	H228 Flammable solid	
2	Flame	Warning	H228 Flammable solid	
		Precautionary sta	tements	
Prev	ention	Response	Storage	Disposal
P210 Keep away from heat, I open flames and other is smoking. P240 Ground and bond conta equipment. – if the solid is electrosta P241 Use explosion-proof [el- lighting/]equipment. – if dust clouds can occu – text in square brackets specific electrical, ventil equipment if necessary a – precautionary statement local or national legislat specific provisions. P280 Wear protective gloves, protection/face protectif protection/ Manufacturer/supplier of to specify the appropriate equipment.	ainer and receiving attically sensitive. attically sensitive. attically sensitive. attical/ventilating/ r. may be used to specify atting, lighting or other nd as appropriate. att may be omitted where ion introduces more y protective clothing/eye ion/hearing r the competent authority			

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SELF-REACTIVE SUBSTANCES AND MIXTURES

(CHAPTER 2.8)

Hazard category	
Type A	



Signal word Danger Hazard statement

H240 Heating may cause an explosion

Precautionary statements					
Prevention	Response	Storage	Disposal		
 P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P234 Keep only in original packaging. P235 Keep cool. may be omitted if P411 is given on the label. P240 Ground and bond container and receiving equipment. if electrostatically sensitive and able to generate an explosive atmosphere. P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/ Manufacturer/supplier or the competent authority to specify the appropriate personal protective equipment. 	P370 + P372 + P380 + P373 In case of fire: Explosion risk. Evacuate area. DO NOT fight fire when fire reaches explosives.	P403 Store in a well-ventilated place. - except for temperature controlled self- reactive substances and mixtures or organic peroxides because condensation and consequent freezing may take place. P411 Store at temperatures not exceeding °C/°F. - if temperature control is required (according to section 2.8.2.3 or 2.15.2.3 of the GHS) or if otherwise deemed necessary. Manufacturer/supplier or the competent authority to specify temperature using applicable temperature scale. P420 Store separately.	P501 Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified). Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.		

SELF-REACTIVE SUBSTANCES AND MIXTURES

(CHAPTER 2.8)

Hazard categorySymbolType BExplodin

Exploding bomb and flame



Signal word Danger Hazard statement

H241 Heating may cause a fire or explosion

Precautionary statements					
Prevention	Response	Storage	Disposal		
 P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P234 Keep only in original packaging. P235 Keep cool may be omitted if P411 is given on the label. P240 Ground and bond container and receiving equipment. if electrostatically sensitive and able to generate an explosive atmosphere. P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/ Manufacturer/supplier or the competent authority to specify the appropriate personal protective equipment. 	 P370 + P380 + P375 [+ P378] In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion. [Useto extinguish] <i>text in square brackets to be included if water increases risk.</i> Manufacturer/supplier or the competent authority to specify appropriate media. 	P403 Store in a well-ventilated place. – except for temperature controlled self- reactive substances and mixtures or organic peroxides because condensation and consequent freezing may take place. P411 Store at temperatures not exceeding °C/°F. – if temperature control is required (according to section 2.8.2.3 or 2.15.2.3 of the GHS) or if otherwise deemed necessary. Manufacturer/supplier or the competent authority to specify temperature using applicable temperature scale. P420 Store separately.	P501 Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified). Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.		

SELF-REACTIVE SUBSTANCES AND MIXTURES

(CHAPTER 2.8)

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

Precautionary statements

Prevention	Response	Storage	Disposal			
 P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P234 Keep only in original packaging. P235 Keep cool may be omitted if P411 is given on the label. P240 Ground and bond container and receiving equipment. if electrostatically sensitive and able to generate an explosive atmosphere. P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/ Manufacturer/supplier or the competent authority to specify the appropriate personal protective equipment. 	P370 + P378 In case of fire: Use to extinguish – <i>if water increases risk.</i> Manufacturer/supplier or the competent authority to specify appropriate media.	P403 Store in a well-ventilated place. – except for temperature controlled self- reactive substances and mixtures or organic peroxides because condensation and consequent freezing may take place. P411 Store at temperatures not exceeding °C/°F. – if temperature control is required (according to section 2.8.2.3 or 2.15.2.3 of the GHS) or if otherwise deemed necessary. Manufacturer/supplier or the competent authority to specify temperature using applicable temperature scale. P420 Store separately.	P501 Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified). Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.			

PYROPHORIC LIQUIDS

(CHAPTER 2.9)

Hazard category

1

Symbol Flame **Signal word** Danger Hazard statement

H250 Catches fire spontaneously if exposed to air

Precautionary statements				
Prevention	Response	Storage	Disposal	
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.	P302 + P334 IF ON SKIN: Immerse in cool water or wrap in wet bandages.			
 P222 Do not allow contact with air. <i>-</i> if emphasis of the hazard statement is deemed necessary. P233 Keep container tightly closed. 	 P370 + P378 In case of fire: Use to extinguish <i>if water increases risk.</i> Manufacturer/supplier or the competent authority to specify appropriate media. 			
P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/ Manufacturer/supplier or the competent authority to specify the appropriate personal protective equipment.				

PYROPHORIC SOLIDS

(CHAPTER 2.10)

Hazard category

1

Symbol Flame



Signal word Danger

Hazard statement

H250 Catches fire spontaneously if exposed to air

Precautionary statements					
Prevention	Response	Storage	Disposal		
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P222	P302 + P335 + P334 IF ON SKIN: Brush off loose particles from skin. Immerse in cool water or wrap in wet bandages.				
Do not allow contact with air. - <i>if emphasis of the hazard statement is deemed</i> <i>necessary.</i> P233 Keep container tightly closed.	 P370 + P378 In case of fire: Use to extinguish <i>if water increases risk.</i> Manufacturer/supplier or the competent authority to specify appropriate media. 				
P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/ Manufacturer/supplier or the competent authority to specify the appropriate personal protective equipment.					

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SELF-HEATING SUBSTANCES AND MIXTURES

(CHAPTER 2.11)

Hazard category	Symbol	Signal word	Hazard statement	
1	Flame	Danger	H251 Self-heating; may catch fire	
2	Flame	Warning	H252 Self-heating in large quantities; may catch fi	re
		Precautionar	y statements	
Pre	evention	Response	Storage	Disposal
protection/face protecti Manufacturer/supplier or	<i>B</i> is given on the label. /protective clothing/eye ion/hearing protection/ the competent authority to ersonal protective equipment.		 P407 Maintain air gap between stacks or pallets. P410 Protect from sunlight P413 Store bulk masses greater than kg/lbs at temperatures not exceeding°C/°F. Manufacturer/supplier or the competent authority to specify mass and temperature using applicable scale. P420 Store separately. 	

SUBSTANCES AND MIXTURES WHICH, IN CONTACT WITH WATER, EMIT FLAMMABLE GASES

(CHAPTER 2.12)

Hazard category	Symbol	Signal word	Hazard stat	ement	
1	Flame	Danger	H260 Ir	a contact with water releases flammable	gases, which may ignite spontaneously
2	Flame	Danger	H261 Ir	n contact with water releases flammable	gas
		Precaution	nary statem	ents	
Pre	evention	Response		Storage	Disposal
to specify appropriate lie not appropriate. P280 Wear protective gloves protection/face protect	ints under inert gas/ ture reacts readily with to or the competent authority quid or gas if "inert gas" is /protective clothing/eye ion/hearing protection/ r the competent authority to	P302 + P335 + P334 IF ON SKIN: Brush off loose partic skin and immerse in cool water. P370 + P378 In case of fire: Use to extinguish – <i>if water increases risk.</i> Manufacturer/supplier or the comp authority to specify appropriate media	etent	P402 + P404 Store in a dry place. Store in a closed container.	P501 Dispose of contents/container to in accordance with local/regional/national/ international regulations (to be specified). Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.

SUBSTANCES AND MIXTURES WHICH, IN CONTACT WITH WATER, EMIT FLAMMABLE GASES

(CHAPTER 2.12)

Hazard category	Symbol	
3	Flame	~~~



Signal word Warning Hazard statement

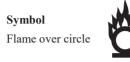
H261 In contact with water releases flammable gas

Precautionary statements						
Prevention	Response	Storage	Disposal			
 P231 + P232 Handle and store contents under inert gas/ Protect from moisture. if the substance or mixture reacts readily with moisture in air. Manufacturer/supplier or the competent authority to specify appropriate liquid or gas if "inert gas" is not appropriate. P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/ Manufacturer/supplier or the competent authority to specify the appropriate personal protective equipment. 	P370 + P378 In case of fire: Use to extinguish. – <i>if water increases risk.</i> Manufacturer/supplier or the competent authority to specify appropriate media.	P402 + P404 Store in a dry place. Store in a closed container.	P501 Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified). Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.			

OXIDIZING LIQUIDS

(CHAPTER 2.13)

Hazard	category
1	



Signal word Danger Hazard statement

H271 May cause fire or explosion; strong oxidizer

Precautionary statements					
Prevention	Response	Storage	Disposal		
 P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P220 Keep away from clothing and other combustible materials. P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/ Manufacturer/supplier or the competent authority to specify the appropriate personal protective equipment. P283 Wear fire resistant or flame retardant clothing. 	 P306 + P360 IF ON CLOTHING: Rinse immediately contaminated clothing and skin with plenty of water before removing clothes. P371 + P380 + P375 In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion. P370 + P378 In case of fire: Use to extinguish. if water increases risk Manufacturer/supplier or the competent authority to specify appropriate media. 	P420 Store separately.	P501 Dispose of contents/container to in accordance with local/regional/ national/international regulations (to be specified). Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.		

OXIDIZING LIQUIDS

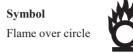
(CHAPTER 2.13)

Hazard category 2 3	Symbol Flame over circle Flame over circle	Signal word Danger Warning Precautionary	H272 H272	l statement May intensify fire; oxidizer May intensify fire; oxidizer Its	
Pre	evention	Response		Storage	Disposal
flames and other ignition P220 Keep away from clothin materials. P280 Wear protective gloves protection/face protect	hot surfaces, sparks, open on sources. No smoking. ng and other combustible /protective clothing/eye ion/hearing protection/ r the competent authority to personal protective	 P370 + P378 In case of fire: Use to extinguish. <i>if water increases risk.</i> Manufacturer/supplier or the competent authority to specify appropriate media. 			P501 Dispose of contents/container to in accordance with local/regional/ national/international regulations (to be specified). Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.

OXIDIZING LIQUIDS

(CHAPTER 2.13)

Hazard category



Signal word Danger Hazard statement

H271 May cause fire or explosion; strong oxidizer

Precautionary statements					
Prevention	Response	Storage	Disposal		
 P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P220 Keep away from clothing and other combustible materials. P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/ Manufacturer/supplier or the competent authority to specify the appropriate personal protective equipment. P283 Wear fire resistant or flame retardant clothing. 	 P306 + P360 IF ON CLOTHING: Rinse immediately contaminated clothing and skin with plenty of water before removing clothes. P371 + P380 + P375 In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion. P370 + P378 In case of fire: Use to extinguish. <i>if water increases risk.</i> Manufacturer/supplier or the competent authority to specify appropriate media. 	P420 Store separately.	P501 Dispose of contents/container to in accordance with local/regional/ national/international regulations (to be specified). Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.		

OXIDIZING SOLIDS

(CHAPTER 2.14)

Hazard category 2 3	Symbol Flame over circle Flame over circle	8	Signal word Danger Warning	Hazard H272 H272	l statement May intensify fire; oxidiz May intensify fire; oxidiz	
			Precautionary stat	ements		
Pr	evention		Response		Storage	Disposal
flames and other igniti P220 Keep away from clothi materials. P280 Wear protective gloves protection/face protect	hot surfaces, sparks, open ion sources. No smoking. ing and other combustible s/protective clothing/eye tion/hearing protection/ or the competent authority to personal protective	 <i>if water inclusion</i> Manufacture 	t Use to extinguish. <i>reases risk.</i> er/supplier or the competent ecify appropriate media.			P501 Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified). Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.

ORGANIC PEROXIDES

(CHAPTER 2.15)

Hazard category Type A Symbol Exploding bomb

Signal word Danger Hazard statement

H240 Heating may cause an explosion

Precautionary statements						
Prevention	Response	Storage	Disposal			
 P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P234 Keep only in original packaging. P235 Keep cool. may be omitted if P411 is given on the label. P240 Ground and bond container and receiving equipment. if electrostatically sensitive and able to generate an explosive atmosphere. P280 Wear protective gloves/ protective clothing/eye protection/face protection/hearing protection/ Manufacturer/supplier or the competent authority to specify the appropriate personal protective equipment. 	P370 + P372 + P380 + P373 In case of fire: Explosion risk. Evacuate area. DO NOT fight fire when fire reaches explosives.	 P403 Store in a well-ventilated place. except for temperature controlled self-reactive substances and mixtures or organic peroxides because condensation and consequent freezing may take place. P410 Protect from sunlight. P411 Store at temperatures not exceeding °C/°F. if temperature control is required (according to section 2.8.2.3 or 2.15.2.3 of the GHS) or if otherwise deemed necessary. un Manufacturer/supplier or the competent authority to specify temperature using applicable temperature scale P420 	P501 Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified). Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.			

ORGANIC PEROXIDES

(CHAPTER 2.15)

Hazard category	Symbo
Type B	Explod



Signal word Danger Hazard statement

H241 Heating may cause a fire or explosion

Precautionary statements						
Prevention	Response	Storage	Disposal			
 P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P234 Keep only in original packaging. P235 Keep cool. may be omitted if P411 is given on the label. P240 Ground and bond container and receiving equipment. if electrostatically sensitive and able to generate an explosive atmosphere. P280 Wear protective gloves/ protective clothing/eye protection/face protection/hearing protection/ Manufacturer/supplier or the competent authority to specify the appropriate personal protective equipment. 	P370 + P380 + P375 [+ P378] In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion. [Useto extinguish] - text in square brackets to be used if water increases risk. Manufacturer/supplier or the competent authority to specify appropriate media.	P403 Store in a well-ventilated place. - except for temperature controlled self- reactive substances and mixtures or organic peroxides because condensation and consequent freezing may take place. P410 Protect from sunlight. P411 Store at temperatures not exceeding °C/°F. - if temperature control is required (according to section 2.8.2.3 or 2.15.2.3 of the GHS) or if otherwise deemed necessary. Manufacturer/supplier or the competent authority to specify temperature using applicable temperature scale. P420 Store separately.	P501 Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified). Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.			

ORGANIC PEROXIDES

(CHAPTER 2.15)

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

Precautionary statements

Prevention	Response	Storage	Disposal
P210	P370 + P378	P403	P501
Keep away from heat, hot surfaces, sparks, open	In case of fire: Use to	Store in a well-ventilated place.	Dispose of contents/container to
flames and other ignition sources. No smoking.	extinguish.	 – except for temperature controlled self-reactive 	in accordance with
P234	- if water increases risk.	substances and mixtures or organic peroxides	local/regional/national/international
	Manufacturer/supplier or the	because condensation and consequent freezing	regulations (to be specified).
Keep only in original packaging.	competent authority to specify	may take place.	Manufacturer/supplier or the competent
P235	appropriate media.	P410	authority to specify whether disposal
Keep cool.		Protect from sunlight.	requirements apply to contents, container or both.
– may be omitted if P411 is given on the label.		i i ottot ii oin sunight	or both.
70.10		P411	
P240		Store at temperatures not exceeding	
Ground and bond container and receiving		°C/°F.	
equipment.		- if temperature control is required (according to	
 if electrostatically sensitive and able to generate an explosive atmosphere. 		section 2.8.2.3 or 2.15.2.3 of the GHS) or if	
explosive almosphere.		otherwise deemed necessary	
P280		Manufacturer/supplier or the competent authority	
Wear protective gloves/ protective clothing/eye		to specify temperature using applicable temperature scale.	
protection/face protection/hearing protection/		temperature scare.	
Manufacturer/supplier or the competent authority to		P420	
specify the appropriate personal protective equipment.		Store separately.	

CORROSIVE TO METALS

(CHAPTER 2.16)

Hazard category 1	Symbol Corrosion	Y	Signal word Warning	Hazaro H290	l statement May be corrosive to metals	
			Precautionary s	tatements		
Pro	evention		Response		Storage	Disposal
P234 Keep only in original pa	ackaging.		P390 Absorb spillage to prevent material-dam	with - ma N	6 re in a corrosion resistant/ container n a resistant inner liner. ay be omitted if P234 is given on the label fanufacturer/supplier or the competent pority to specify other compatible materials.	

DESENSITIZED EXPLOSIVES

(CHAPTER 2.17)

Hazard category	gory Symbol		Hazard	Hazard statement		
1	Flame	Danger	H206	Fire, blast or projection hazard; increased risk of explosion if desensitizing agent is reduced		
2	Flame	Danger	H207	Fire or projection hazard; increased risk of explosion if desensitizing agent is reduced		
3	Flame 9	Warning	H207	Fire or projection hazard; increased risk of explosion if desensitizing agent is reduced		

Precautionary statements							
Prevention	Response	Storage	Disposal				
 P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P212 Avoid heating under confinement or reduction of the desensitizing agent. P230 Keep wetted with Manufacturer/supplier or the competent authority to specify appropriate material. 	P370+P380+P375 In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion.	P401 Store in accordance with Manufacturer/supplier or the competent authority to specify local/regional/ national/international regulations as applicable.	P501 Dispose of contents/containers to in accordance with local/regional/national /international regulations (to be specified). Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.				
P233 Keep container tightly closed.							
P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/ Manufacturer/supplier or the competent authority to specify the appropriate personal protective equipment.							

DESENSITIZED EXPLOSIVES

(CHAPTER 2.17)

Hazard category 4



Signal word Warning Hazard statement

H208 Fire hazard; increased risk of explosion if desensitizing agent is reduced

	Precautionary statements						
Prevention	Response	Storage	Disposal				
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.	P371+P380+P375 In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.	P401 Store in accordance with Manufacturer/supplier or the competent authority to specify local/regional/	P501 Dispose of contents/containers to in accordance with local/regional/national /international				
P212 Avoid heating under confinement or reduction of the desensitizing agent.		national/international regulations as applicable.	regulations (to be specified). Manufacturer/supplier or the competent authority to specify whether disposal				
P230 Keep wetted with Manufacturer/supplier or the competent authority to specify appropriate material.			requirements apply to contents, container or both.				
P233 Keep container tightly closed.							
P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/ Manufacturer/supplier or the competent authority to specify the appropriate personal protective equipment.							

ACUTE TOXICITY - ORAL

(CHAPTER 3.1)

Hazard category	Symbol		Signal word	Hazaro	l statement
1	Skull and crossbones	\frown	Danger	H300	Fatal if swallowed
2	Skull and crossbones		Danger	H300	Fatal if swallowed
3	Skull and crossbones		Danger	H301	Toxic if swallowed

Precautionary statements						
Prevention	Response	Storage	Disposal			
 P264 Washthoroughly after handling. Manufacturer/supplier or the competent authority to specify parts of the body to be washed after handling. P270 Do not eat, drink or smoke when using this product. 	 P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor/ Manufacturer/supplier or the competent authority to specify the appropriate source of emergency medical advice. P321 Specific treatment (see on this label) if immediate administration of antidote is required. Reference to supplemental first aid instruction. P330 Rinse mouth. 	P405 Store locked up.	P501 Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified). Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.			

ACUTE TOXICITY – ORAL

(CHAPTER 3.1)

Hazard category	Symbol	Signal word	Hazaro	l statement
4	Exclamation mark	Warning	H302	Harmful if swallowed

Precautionary statements						
Prevention	Response	Storage	Disposal			
 P264 Wash thoroughly after handling. Manufacturer/supplier or the competent authority to specify parts of the body to be washed after handling. P270 Do not eat, drink or smoke when using this product. 	 P301 + P312 IF SWALLOWED: Call a POISON CENTER/ doctor/if you feel unwell. Manufacturer/supplier or the competent authority to specify the appropriate source of emergency medical advice. P330 Rinse mouth. 		P501 Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified). Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.			

ACUTE TOXICITY – ORAL

(CHAPTER 3.1)

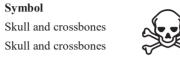
Hazard category	Symbol	Signal word	Hazard statement		
5	No symbol	Warning	H303 May be harmful if swallowed		
		Precautionary stat	tements		
Prevention	n	Response		Storage	Disposal
		P301+ P312 IF SWALLOWED: Call a POISON CENTER/doc feel unwell. Manufacturer/supplier or the competent authority to appropriate source of emergency medical advice.	·		

(CHAPTER 3.1)

Hazard	category
1	

2

Symbol Skull and crossbones



Signal word Danger Danger

Hazard statement

H310 Fatal in contact with skin

H310 Fatal in contact with skin

	Precautionary statements				
Prevention	Response	Storage	Disposal		
 P262 Do not get in eyes, on skin, or on clothing. P264 Wash thoroughly after handling. Manufacturer/supplier or the competent authority to specify parts of the body to be washed after handling. P270 Do not eat, drink or smoke when using this product. 	 P302 + P352 IF ON SKIN: Wash with plenty of water/ Manufacturer/supplier or the competent authority may specify a cleansing agent if appropriate, or may recommend an alternative agent in exceptional cases if water is clearly inappropriate. P310 Immediately call a POISON CENTER/doctor/ Manufacturer/supplier or the competent authority to specify the appropriate source of emergency medical advice. 	P405 Store locked up.	P501 Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified). Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.		
P280 Wear protective gloves/protective clothing. Manufacturer/supplier or the competent authority may further specify type of equipment where appropriate.	 P321 Specific treatment (see on this label) if immediate measures such as specific cleansing agent is advised. Reference to supplemental first aid instruction. P361+ P364 Take off immediately all contaminated clothing and wash it before reuse. 				

(CHAPTER 3.1)

Hazard category

3

Symbol

Skull and crossbones



Signal word Danger Hazard statement

H311 Toxic in contact with skin

	Precautionary statements				
Prevention	Response	Storage	Disposal		
P280 Wear protective gloves/protective clothing. Manufacturer/supplier or the competent authority may further specify type of equipment where appropriate.	 P302 + P352 IF ON SKIN: Wash with plenty of water/ Manufacturer/supplier or the competent authority may specify a cleansing agent if appropriate, or may recommend an alternative agent in exceptional cases if water is clearly inappropriate. P312 Call a POISON CENTER/doctor/if you feel unwell. Manufacturer/supplier or the competent authority to specify the appropriate source of emergency medical advice. P321 Specific treatment (see on this label) - if immediate measures such as specific cleansing agent is advised. Reference to supplemental first aid instruction. P361 + P364 Take off immediately all contaminated clothing and wash it before reuse. 	P405 Store locked up.	P501 Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified). Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.		

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

	Precautionary statements				
Prevention	Response	Storage	Disposal		
P280 Wear protective gloves/protective clothing Manufacturer/supplier or the competent authority may further specify type of equipment where appropriate.	 P302 + P352 IF ON SKIN: Wash with plenty of water/ Manufacturer/supplier or the competent authority may specify a cleansing agent if appropriate, or may recommend an alternative agent in exceptional cases if water is clearly inappropriate. P312 Call a POISON CENTER/doctor/if you feel unwell. Manufacturer/supplier or the competent authority to specify the appropriate source of emergency medical advice. P321 Specific treatment (see on this label) - if immediate measures such as specific cleansing agent is advised. Reference to supplemental first aid instruction. P362 + P364 Take off contaminated clothing and wash it before reuse. 		P501 Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified). Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.		

Hazard category	Symbol	Signal word	Hazard	Hazard statement	
5	No symbol	Warning	H313	May be harmful in contact w	vith skin
	Precautionary statements				
Prevention		Response		Storage	Disposal
	II y sp	302 + P312 F ON SKIN: Call a POISON CENTER/doctor/if ou feel unwell. Manufacturer/supplier or the competent authority to pecify the appropriate source of emergency medical dvice.			

Hazard category	Symbol	\frown	Signal word	Hazar	d statement
1	Skull and crossbones		Danger	H330	Fatal if inhaled
2	Skull and crossbones		Danger	H330	Fatal if inhaled

Precautionary statements				
Prevention	Response	Storage	Disposal	
 P260 Do not breathe dust/fume/gas/mist/ vapours/spray. Manufacturer/supplier or the competent authority to specify applicable conditions. P271 Use only outdoors or in a well-ventilated area. P284 [In case of inadequate ventilation] wear respiratory protection. – 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. Manufacturer/supplier or the competent authority to specify equipment. 	 P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P310 Immediately call a POISON CENTER/doctor/ Manufacturer/supplier or the competent authority to specify the appropriate source of emergency medical advice. P320 Specific treatment is urgent (see on this label) <i>if immediate administration of antidote is required.</i> Reference to supplemental first aid instruction. 	P403 + P233 Store in a well-ventilated place. Keep container tightly closed. – if the chemical is volatile and may generate a hazardous atmosphere. P405 Store locked up.	P501 Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified). Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.	

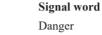
(CHAPTER 3.1)

Hazard category

3

Symbol

Skull and crossbones



rd

Hazard statement H311 Toxic if inhaled

Precautionary statements Prevention Response Storage Disposal P403 + P233 P261 P304 + P340P501 Avoid breathing dust/fume/gas/mist/ IF INHALED: Remove person to fresh air Store in a well-ventilated place. Keep Dispose of content/container to... vapours/spray. and keep comfortable for breathing. container tightly closed. ... in accordance with - may be omitted if P260 is given on the label - *if the chemical is volatile and may* local/regional/national/international P311 Manufacturer/supplier or the competent authority to generate a hazardous atmosphere. regulations (to be specified). Call a POISON CENTER/doctor... specify applicable conditions. Manufacturer/supplier or the competent ... Manufacturer/supplier or the competent P405 authority to specify whether disposal P271 authority to specify the appropriate source of Store locked up. requirements apply to contents, container emergency medical advice. Use only outdoors or in a well-ventilated area. or both. P321 Specific treatment (see ... on this label) - *if immediate specific measures are required.* ... Reference to supplemental first aid instruction.

(CHAPTER 3.1)

Hazard category	Symbol	Signal word	Hazard statement
4	Exclamation mark	Warning	H332 Harmful if inhaled

_

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

Hazard category	Symbol	Signal word Ha	zard statement	
5	No symbol	Warning H3	33 May be harmful if inhaled	
		Precautionary statements		
Preventi	on	Response	Storage	Disposal
		P304 + P312 IF INHALED: Call a POISON CENTER/doctor/if you feel unwell. Manufacturer/supplier or the competent authority to specify the appropriate source of emergency medical advice.		

SKIN CORROSION/IRRITATION

(CHAPTER 3.2)

Hazard category 1A to 1C



Signal word Danger Hazard statement

H314 Causes severe skin burns and eye damage

Precautionary statements				
Prevention	Response	Storage	Disposal	
 P260 Do not breathe dusts or mists. <i>- if inhalable particles of dusts or mists may occur during use.</i> P264 Washthoroughly after handling. Manufacturer/supplier or the competent authority to specify parts of the body to be washed after handling. P280 Wear protective gloves/protective clothing/eye protection/face protection. Manufacturer/supplier or the competent authority may further specify type of equipment where appropriate. 	 P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. - text in square brackets to be included where the manufacturer/supplier or the competent authority considers it appropriate for the specific chemical. P363 Wash contaminated clothing before reuse. P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P310 Immediately call a POISON CENTER/doctor/ Manufacturer/supplier or the competent authority to specify the appropriate source of emergency medical advice. P321 Specific treatment (see on this label) Reference to supplemental first aid instruction. Manufacturer/supplier or the competent authority may specify a cleansing agent if appropriate. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. 	P405 Store locked up.	P501 Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified). Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.	

SKIN CORROSION/IRRITATION

Hazard category	Symbol	Signal word	Hazard statement
2	Exclamation mark	Warning	H315 Causes skin irritation

Precautionary statements					
Prevention	Response	Storage	Disposal		
 P264 Wash thoroughly after handling. Manufacturer/supplier or the competent authority to specify parts of the body to be washed after handling. P280 Wear protective gloves. Manufacturer/supplier or the competent authority may further specify type of equipment where appropriate. 	 P302 + P352 IF ON SKIN: Wash with plenty water/ Manufacturer/supplier or the competent authority may specify a cleansing agent if appropriate, or may recommend an alternative agent in exceptional cases if water is clearly inappropriate. P321 Specific treatment (see on this label) Reference to supplemental first aid instruction. Manufacturer/supplier or the competent authority may specify a cleansing agent if appropriate. P332 + P313 If skin irritation occurs: Get medical advice/attention. <i>- may be omitted when P333+P313 appears on the label</i> Manufacturer/supplier or the competent authority to select medical advice or attention as appropriate. P362 + P364 Take off contaminated clothing and wash it before reuse. 				

SKIN CORROSION/IRRITATION

Hazard category	Symbol	Signal word	Hazard statement			
3	No symbol	Warning	H316 Causes mild skin irr	itation		
	Precautionary statements					
Prevention Response St			Storage	Disposal		
		P332 + P313 If skin irritation occurs: Get medical advice/attention. <i>– may be omitted when P333+P313 appears on the label.</i> Manufacturer/supplier or the competent authority to select medical advice or attention as appropriate.				

EYE DAMAGE/IRRITATION

(CHAPTER 3.3)

Hazard category	Symbol	F	
1	Corrosion	1.1	

Signal word Danger Hazard statement

H318 Causes serious eye damage

	Precautionary statements					
Prevention	Response	Storage	Disposal			
P280 Wear eye protection/face protection. Manufacturer/supplier or the competent authority may further specify type of equipment where appropriate.	 P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 Immediately call a POISON CENTER/doctor/Manufacturer/supplier or the competent authority to specify the appropriate source of emergency medical advice. 					

EYE DAMAGE/IRRITATION

Hazard category	Symbol	Signal word	Hazard statement
2A	Exclamation mark	Warning	H319 Causes serious eye irritation

Precautionary statements					
Prevention	Response	Storage	Disposal		
P264 Wash thoroughly after handling.	P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for				
Manufacturer/supplier or the competent authority to specify parts of the body to be washed after handling.	several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313				
P280 Wear eye protection/face protection. Manufacturer/supplier or the competent authority may further specify type of equipment where appropriate.	If eye irritation persists: Get medical advice/attention. Manufacturer/supplier or the competent authority to select medical advice or attention as appropriate.				

EYE DAMAGE/IRRITATION

Hazard category	Symbol	Signal word	Hazaro	d statement	
2B	No symbol	Warning	H320	Causes eye irritation	
		Precautionary statements			
Preve	ntion	Response		Storage	Disposal
P264 Wash thoroughly after I Manufacturer/supplier or t specify parts of the body to b	the competent authority to	P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.			
		P337 + P313 If eye irritation persists: Get medical advice/attention. Manufacturer/supplier or the competent authority to select medical advice or attention as appropriate.			

SENSITIZATION – RESPIRATORY

(CHAPTER 3.4)

Hazard category 1, 1A, 1B



Symbol

Signal word Danger

Hazard statement

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

Precautionary statements					
Prevention	Response	Storage	Disposal		
 P261 Avoid breathing dust/fume/gas/mist/ vapours/spray. may be omitted if P260 is given on the label Manufacturer/supplier or the competent authority to specify applicable conditions. P284 [In case of inadequate ventilation] wear respiratory protection. 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. Manufacturer/supplier or the competent authority to specify equipment. 	P304 + P340 IF INHALED: remove person to fresh air and keep comfortable for breathing. P342 + P311 If experiencing respiratory symptoms: Call a POISON CENTER/doctor/ Manufacturer/supplier or the competent authority to specify the appropriate source of emergency medical advice.		P501 Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified). Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.		

SENSITIZATION – SKIN

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

Precautionary statements						
Prevention	Prevention Response Storage Disposal					
 P261 Avoid breathing dust/fume/gas/mist/ vapours/spray. <i>may be omitted if P260 is given on the label</i> Manufacturer/supplier or the competent authority to specify applicable conditions. P272 Contaminated work clothing should not be allowed out of the workplace. P280 Wear protective gloves. Manufacturer/supplier or the competent authority may further specify type of equipment where appropriate. 	 P302 + P352 IF ON SKIN: Wash with plenty of water/ Manufacturer/supplier or the competent authority may specify a cleansing agent if appropriate, or may recommend an alternative agent in exceptional cases if water is clearly inappropriate. P333 + P313 If skin irritation or rash occurs: Get medical advice/attention. Manufacturer/supplier or the competent authority to select medical advice or attention as appropriate. P321 Specific treatment (see on this label) Reference to supplemental first aid instruction. Manufacturer/supplier or the competent authority may specify a cleansing agent if appropriate. P362 + P364 Take off contaminated clothing and wash it before reuse. 		P501 Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified). Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.			

GERM CELL MUTAGENICITY (CHAPTER 3.5)

Hazard category Symbol Signal word Hazard statement Health hazard May cause genetic defects <...> 1 Danger H340 2 Health hazard 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		
 P201 Obtain special instructions before use. <i>omit for consumer products where P202 is used.</i> P202 Do not handle until all safety precautions have been read and understood. P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/ Manufacturer/supplier or the competent authority to specify the appropriate personal protective equipment. 	P308 + P313 IF exposed or concerned: Get medical advice/attention. Manufacturer/supplier or the competent authority to select medical advice or attention as appropriate.	P405 Store locked up.	P501 Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified). Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.		

CARCINOGENICITY (CHAPTER 3.6)

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

	Precautionary statements							
Prevention	Response	Storage	Disposal					
 P201 Obtain special instructions before use. omit for consumer products where P202 is used. P202 Do not handle until all safety precautions have been read and understood. P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/ Manufacturer/supplier or the competent authority to specify the appropriate personal protective equipment. 	P308 + P313 IF exposed or concerned: Get medical advice/attention. Manufacturer/supplier or the competent authority to select medical advice or attention as appropriate.	P405 Store locked up.	P501 Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified). Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.					

REPRODUCTIVE TOXICITY (CHAPTER 3.7)

Hazard category	Symbol	Signal word Hazard statement				
1	Health hazard	Danger	H360	May damage fertilit	y or the unborn child <> <<>>	
2	Health hazard	Warning	H361	Suspected of damag	, sing fertility or the unborn child $< > <$	<<>>>
			<>	(state specific effect	if known)	
			<<>>	(state route of expo	sure if it is conclusively proven that no	o other routes of exposure cause the hazard)
	Precautionary statements					
	Prevention	Response		Storage	Disposal	
 P201 Obtain special instructions before use. <i>omit for consumer products where P202 is used.</i> P202 Do not handle until all safety precautions have been read and understood. P280 Wear protective gloves/protective clothing/eye 		P308 + P313 IF exposed or con advice/attention. Manufacturer/supp authority to select r appropriate.	olier or the		P405 Store locked up.	P501 Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified). Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.

Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/... Manufacturer/supplier or the competent authority to specify the appropriate personal protective equipment.

REPRODUCTIVE TOXICITY (CHAPTER 3.7)

(effects on or via lactation)

Hazard category	Symbol	Signal word	Hazard	l statement	
(additional)	No symbol	No signal word	H362	May cause harm to breast-fed children	
		Precautionary statement	5		
Preve	ntion	Response		Storage	Disposal
 P201 Obtain special instructions <i>omit for consumer products</i> P202 Do not handle until all safet read and understood. 	where P202 is used.	P308 + P313 IF exposed or concerned: Get medical advice/attention. Manufacturer/supplier or the competent authority to select medical advice or attention as appropriate.	0		
P260 Do not breathe dusts or mis – <i>if inhalable particles of dus</i> <i>during use.</i>					
P263 Avoid contact during pregn	nancy and while nursing.				
P264 Wash thoroughly after h Manufacturer/supplier or t specify parts of the body to b	he competent authority to				
P270 Do not eat, drink or smoke	when using this product.				

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (CHAPTER 3.8)

Hazard category

Symbol Health hazard



H370 Causes damage to organs <...> <<...>>

<...> (or state all organs affected if known)

<<...>> (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)

Precautionary statements							
Prevention	Response	Storage	Disposal				
 P260 Do not breathe dust/fume/gas/mist/ vapours/spray. Manufacturer/supplier or the competent authority to specify applicable conditions. P264 Washthoroughly after handling. Manufacturer/supplier or the competent authority to specify parts of the body to be washed after handling. P270 Do not eat, drink or smoke when using this product. 	 P308 + P311 IF exposed or concerned: Call a POISON CENTER/doctor/ Manufacturer/supplier or the competent authority to specify the appropriate source of emergency medical advice. P321 Specific treatment (see on this label) if immediate measures are required. Reference to supplemental first aid instruction. 	P405 Store locked up.	P501 Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified). Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.				

SPECIFIC TARGET ORGAN TOXICITY (Single exposure) (CHAPTER 3.8)

Hazard category 2 **Symbol** Health hazard



Warning

H371 May cause damage to organs <...> <<...>>

<...> (or state all organs affected, if known)

<<...>> (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)

	Precautionary statements								
Prevention	Response	Storage	Disposal						
 P260 Do not breathe dust/fume/gas/mist/ vapours/spray. Manufacturer/supplier or the competent authority to specify applicable conditions. P264 Wash thoroughly after handling. Manufacturer/supplier or the competent authority to specify parts of the body to be washed after handling. 	P308 + P311 IF exposed or concerned: Call a POISON CENTER/doctor/ Manufacturer/supplier or the competent authority to specify the appropriate source of emergency medical advice.	P405 Store locked up.	P501 Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified). Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.						
P270 Do not eat, drink or smoke when using this product.									

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (CHAPTER 3.8)

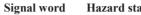
Hazard category	Symbol	Signal word	Hazard	statement
3	Exclamation mark	Warning	H335	May cause respiratory irritation; or
	•		H336	May cause drowsiness or dizziness

	Precautionary stateme	ents	
Prevention	Response	Storage	Disposal
 P261 Avoid breathing dust/fume/gas/mist/ vapours/spray. <i>may be omitted if P260 is given on the label.</i> Manufacturer/supplier or the competent authority to specify applicable conditions. P271 Use only outdoors or in a well-ventilated area. 	 P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P312 Call a POISON CENTER/doctor/if you feel unwell. Manufacturer/supplier or the competent authority to specify the appropriate source of emergency medical advice. 	P403 + P233 Store in a well-ventilated place. Keep container tightly closed. - <i>if the chemical is volatile and may</i> <i>generate a hazardous atmosphere.</i> P405 Store locked up.	P501 Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified). Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.

SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (CHAPTER 3.9)

Hazard category 1

Symbol Health hazard



Danger

Hazard statement

H372 Causes damage to organs <...> through prolonged or repeated exposure <<...>>

(state all organs affected, if known) <...>

<<...>> (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)

Precautionary statements							
Prevention	Response	Storage	Disposal				
 P260 Do not breathe dust/fume/gas/mist/ vapours/spray. Manufacturer/supplier or the competent authority to specify applicable conditions. P264 Wash thoroughly after handling. Manufacturer/supplier or the competent authority to specify parts of the body to be washed after handling. P270 Do not eat, drink or smoke when using this product. 	P314 Get medical advice/attention if you feel unwell. Manufacturer/supplier or the competent authority to select medical advice or attention as appropriate.		P501 Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified). Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.				

SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (CHAPTER 3.9)

 Hazard category
 Symbol
 Signal word
 Hazard statement

 2
 Health hazard
 Warning
 H373
 May cause damage to organs <...> through prolonged or repeated exposure <<...>>

 ...>
 (state all organs affected, if known)

<<...>> (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)

Precautionary statements					
Prevention	Response	Storage	Disposal		
P260 Do not breathe dust/fume/gas/mist/vapours/spray. Manufacturer/supplier or the competent authority to specify applicable conditions.	P314 Get medical advice/attention if you feel unwell. Manufacturer/supplier or the competent authority to select medical advice or attention as appropriate.		P501 Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified). Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.		

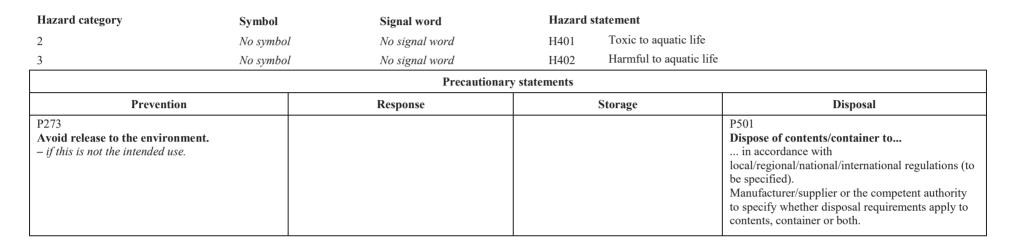
ASPIRATION HAZARD (CHAPTER 3.10)

Hazard category	Symbol		Signal word	Hazard	statement	
1	Health hazard		Danger	H304	May be fatal if swallowed and ente	rs airways
2	Health hazard		Warning	H305	May be harmful if swallowed and e	enters airways
			Precaut	tionary statem	ents	
Pre	vention		Response		Storage	Disposal
		POISON C Manufac authority to emergency P331	0 COWED: Immediately CENTER/ doctor/ turer/supplier or the com o specify the appropriate medical advice. Induce vomiting.	petent	P405 Store locked up.	 P501 Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified). Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.

HAZARDOUS TO THE AQUATIC ENVIRONMENT – SHORT-TERM (ACUTE) HAZARD (CHAPTER 4.1)

Hazard category 1	Symbol Environment	Signal word Warning	Hazard statementH400Very toxic to aqua	tic life
		Precaution	ary statements	
Prev	ention	Response	Storage	Disposal
P273 Avoid release to the environment. - if this is not the intended use.		P391 Collect spillage.		 P501 Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified). Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.

HAZARDOUS TO THE AQUATIC ENVIRONMENT – SHORT-TERM (ACUTE) HAZARD (CHAPTER 4.1)



HAZARDOUS TO THE AQUATIC ENVIRONMENT – LONG-TERM (CHRONIC) HAZARD (CHAPTER 4.1)

Hazard category	Symbol Environment Environment	Signal word Warning		tic life with long lasting effects	
2 Environment No signal word H411 Toxic to aquatic life with long lasting effects Precautionary statements					
Prevention		Response	Storage	Disposal	
P273 Avoid release to the enviro – if this is not the intended u		P391 Collect spillage.		 P501 Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified). Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both. 	

HAZARDOUS TO THE AQUATIC ENVIRONMENT – LONG-TERM (CHRONIC) HAZARD (CHAPTER 4.1)

Hazard category	Symbol	Signal word	Hazar	Hazard statement		
3	No symbol	No signal word	H412	Harmful to aquatic life with lon	g lasting effects	
4	No symbol	No signal word	H413	May cause long lasting harmful effects to aquatic life		
Precautionary statements						
Prevention		Response		Storage	Disposal	
P273 Avoid release to the environ – if this is not the intended us					P501 Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified). Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.	

HAZARDOUS TO THE OZONE LAYER (CHAPTER 4.2)

Hazard category 1	Symbol Exclamation mark		Signal word Warning	Hazard H420	statement Harms public health and the environment b	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

ANNEX 3

Section 4

CODIFICATION OF PICTOGRAMS

A3.4.1 Introduction

A3.4.1.1 *Pictogram* means a graphical composition that may include a symbol plus other graphic elements, such as a border, background pattern or colour that is intended to convey specific information.

A3.4.1.2 This section contains the recommended code assigned to each of the pictograms prescribed by the GHS for sectors other than transport.

A3.4.1.3 The pictogram code is intended to be used for references purposes. It is not part of the pictogram and should not appear on labels or in section 2 of the safety data sheet.

A3.4.2 Codification of pictograms

A3.4.2.1 GHS pictograms for sectors other than transport are assigned a unique alphanumerical code as follows:

- (a) the letters "GHS"; and
- (b) a sequential number "01", "02", "03" etc. assigned in accordance with Table A3.4.1 below.

Code	Hazard pictogram	Symbol
GHS01		Exploding bomb
GHS02		Flame
GHS03		Flame over circle
GHS04	$\mathbf{\widehat{\mathbf{A}}}$	Gas cylinder
GHS05		Corrosion
GHS06		Skull and crossbones
GHS07		Exclamation mark
GHS08		Health hazard
GHS09	¥2	Environment

Table A3.4.1

ANNEX 3

Section 5

EXAMPLES OF PRECAUTIONARY PICTOGRAMS

A3.5.1 Precautionary pictograms

From European Union (Council Directive 92/58/EEC of 24 June 1992)

