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Committee of Experts on the Transport of Dangerous Goods and on the Globally Harmonized System of Classification and Labelling of Chemicals

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Sub-Committee of Experts on the Transport of Dangerous Goods

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Geneva, 3–11 December 2012 Item 8 (e) of the provisional agenda

Issues relating to the Globally Harmonized System of Classification and Labelling of Chemicals: Miscellaneous

Sub-Committee of Experts on the Globally Harmonized System of Classification and Labelling of Chemicals

Twenty-fourth session

Geneva, 12–14 December 2012 Item 2 (d) of the provisional agenda

Updating of the Globally Harmonized System of Classification and Labelling of Chemicals (GHS): Annexes

Amendments to physical hazard precautionary statements and use of the forward slash "/" in GHS precautionary statements

Transmitted by the expert from the United Kingdom on behalf of the informal correspondence group on Annexes 1-3 of the GHS

- 1. This informal document supports document ST/SG/AC.10/C.4/2012/19 on amendments to physical hazard precautionary statements and document ST/SG/AC.10/C.4/2012/20 on use of the forward slash "/" in the precautionary statements.
- 2. Annex 1 contains some corrections and additions to the proposals in ST/SG/AC.10/C.4/2012/19 and ST/SG/AC.10/C.4/2012/20 that were identified at the proof-reading stage.
- 2. Annex 2 sets out the changes to precautionary statements in Tables, A3.2.2, A3.2.3, A3.2.4 and A3.2.5 that are proposed in documents ST/SG/AC.10/C.4/2012/19 and ST/SG/AC.10/C.4/2012/20. The changes are presented in 'track changes' mode together with justifications for each proposed change.
- 3. Annex 3 sets out in track changes mode the proposed changes to the tables in section A3.5.5 of the GHS.



Annex 1

Amendments to the proposals in ST/SG/AC.10/C.4/2012/19 on amendments to physical hazard precautionary statements

For P210

Add the following additional amendment:

Move category 4 flammable liquids to the row for flammable liquids, categories 1, 2, 3 and delete the row for flammable liquids category 4.

For P230

Add the following additional amendment:

Delete the existing condition for use ("- if drying out increases explosion hazard, except as needed for manufacturing or operating processes (e.g. nitrocellulose)").

For P233

Add the following additional amendment:

For acute toxicity (categories 1, 2, 3) specific target organ toxicity (single exposure, respiratory tract irritation and narcotic effects, Category 3), amend the condition for use to read: "- if the chemical is volatile and may generate a hazardous atmosphere.".

For P235

In the new condition for use for flammable liquids, add "flammable" after "other".

For P280

Delete: "Apply the statement additionally to "Unstable explosives"".

(The statement applied already to "Unstable explosives", no need to add this hazard category).

For P321

Delete the dash before the condition for use "Manufacturer/supplier..." and show it as plain text (i.e.: non-italicized)

For P372

Add the following additional amendment:

"For the hazard class "Explosives" (Division 1.4) add the condition for use "- except for explosives of division 1.4 (compatibility group S) in transport packaging."."

For P373

Replace the first amendment with the following:

"For the hazard class "Explosives" (Division 1.4) add the condition for use "- except for explosives of division 1.4 (compatibility group S) in transport packaging".

For P375

In the condition for use replace "1.4S" with "1.4 (compatibility group S)".

For P302 + P335 + P334

Add the following additional amendment:

For pyrophoric solids, add the condition for use: "- text in square brackets to be used for pyrophoric solids."

For P336 + P315

Amend the combination statement to read: "Thaw frosted parts with lukewarm water. Do not rub affected area. Get immediate medical advice.".

For P370 + P378

Remove from self-reactive substances and mixtures Type B and Organic Peroxides Type B, i.e, replace the amendment with the following:

"Remove the statement from the hazard categories Self-reactive substances and mixtures, Types A and B. (Statement should only be applied to self-reactives Types C, D, E and F).

Apply additionally to Organic Peroxides, Types C, D, E and F.".

For P370 + P372 + P380 + P373

Add the following additional amendment:

"For the hazard class "Explosives" (Division 1.4) add the condition for use "- except for explosives of division 1.4S in transport packaging" for the hazard class "Explosives", Divisions 1.1, 1.2, 1.3 and 1.4.

For P370 + P380 + P375

In the condition for use for Division 1.4, replace "1.4S" with "1.4 (compatibility group S)"

Replace the amendment related to self-reactive substances and mixtures and organic peroxides with the following:

"Remove the statement from the hazard categories Self-reactive substances and mixtures, Types A and B."

For P403

In the condition for use, add "flammable" after "other".

For P403 + P235

Remove the combined statement from the hazard category 4 for Flammable liquids and from Organic Peroxides Types A, B, C, D, E, F and self-reactive substances and mixtures Types A, B, C, D, E, F.

In the new conditions for use, add "flammable" after "other."

Add the following additional amendments to the list in document ST/SG/AC.10/C.4/2012/19:

P235 + P410

Delete this combination precautionary statement.

P302 + P334

Amend the combined statement to read: "IF ON SKIN: Immerse in cool water [or wrap in wet bandages].

Add condition for use: "- text in square brackets to be used for pyrophoric liquids".

P370 + P380 + P375 [+ P378] (new)

Add a new combination statement P370 + P380 + P375 [+ P378] to read as follows: "In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion. [Use...to extinguish.]."

Add the conditions for use:

"- text in square brackets to be used if water increases risk."

"... Manufacturer/supplier or the competent authority to specify appropriate media."

Apply this combination statement to self-reactive substances Type B and organic peroxides Type B.

P403 + P233

Amend condition for use to read: "- if the chemical is volatile and may generate a hazardous atmosphere".

P410 + P403

Amend the beginning of the condition for use to read: "P410 may be omitted for gases...".

Amendments to the proposals in ST/SG/AC.10/C.4/2012/20 on use of the forward slash '/' in precautionary statements

For P412

Amend the condition for use to read: "Manufacturer/supplier or the competent authority to use applicable temperature scale."

For P411 and P413

Split the amendment as follows:

"P411

Amend the condition for use to read: "Manufacturer/supplier or the competent authority to use applicable temperature scale."

P413

Amend the condition for use to read: "...Manufacturer/supplier or the competent authority to specify mass and temperature using applicable scale.".".

Add the following additional amendments to the list in document ST/SG/AC.10/C.4/2012/20:

P314

Amend to read "Get medical advice if you feel unwell".

Annex 2

Changes to precautionary statements in tables A3.2.2, A3.2.3, A3.2.4 and A3.2.5

Table A3.2.2: Codification of prevention precautionary statements

Code	Prevention precautionary statements	Hazard class	Hazard category	Conditions for use	Explanation/Justification
(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		
		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	Explosives (chapter 2.1)	Unstable explosive		Proposal to delete unstable explosive:
	understood.	Germ cell mutagenicity (chapter 3.5)	1A, 1B, 2		Unstable explosives are deleted from P202 since
		Carcinogenicity (chapter 3.6)	1A, 1B, 2		covered by P201, which is
		Reproductive toxicity (chapter 3.7)	1A, 1B, 2		shorter and more relevant from a safety point-of-view.
		Flammable gases (including chemically unstable gases) (chapter 2.2)	A, B (chemically unstable gases)		from a sarcty point-of-view.
P210	Keep away from heat, Anot surfaces, sparks, open flames and other ignition sourceshot	Explosives (chapter 2.1)	Divisions 1.1, 1.2, 1.3, 1.4, 1.5	Manufacturer/supplier or the competent authority to specify applicable ignition	Proposal to amend the wording of the statement: This statement is important
	surfaces. No smoking.	Flammable gases (chapter 2.2)	1, 2	source(s).	for avoiding ignition sources
		Aerosols (chapter 2.3)	1, 2, 3		and should not be limited to

	Code	Prevention precautionary statements	Hazard class	Hazard category	Conditions for use	Explanation/Justification
	(1)	(2)	(3)	(4)	(5)	
			Flammable liquids (chapter 2.6) Flammable solids (chapter 2.7)	1, 2, 3 <u>, 4</u> 1, 2		one or two specific ignition sources (such as flames and
			Self-reactive substances and mixtures (chapter 2.8)	Types A, B, C, D, E, F		hot surfaces for flammable liquids). By listing heat, sparks, open flames and other ignition sources, the user, on
			Pyrophoric liquids (chapter 2.9)	1		the one hand, is made aware
			Pyrophoric solids (chapter 2.10)	1		what common ignition
			Oxidizing liquids (chapter 2.13)	1, 2, 3	specify to keep away	sources are but on the other
			Oxidizing solids (chapter 2.14)	1, 2, 3	from heat.	hand is also made aware that there might be further
			Organic peroxides (chapter 2.15)	Types A, B, C, D, E, F		ignition sources.
			Flammable liquids (chapter 2.6)	4	specify to keep away from flames and hot surfaces.	
	P211	Do not spray on an open flame or other ignition source.	Aerosols (chapter 2.3)	1, 2		
,			T	1	T	
	P220	Keep/Store away from	Oxidizing gases (chapter 2.4)	1	Manufacturer/supplier or	Proposal to amend the
		clothing// <u>and other</u> combustible materials.	Self reactive substances and mixtures (chapter 2.8)	Types A, B, C, D, E, F	the competent authority to specify other incompatible materials.	wording of the statement and to delete the conditions for use:
İ			Oxidizing liquids (chapter 2.13)	<u>1,</u> 2, 3		For oxidizers the
İ			Oxidizing solids (chapter 2.14)	<u>1,</u> 2,3		incompatible materials are combustible materials and
			Organic peroxides (chapter 2.15)	Types A, B, C, D, E, F		these are all covered by naming clothing and combustible materials. No need to add further materials.
						Store is removed because it is covered by keep. 'Keep/store' is also confusing because the slash

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Code	Prevention precautionary statements	Hazard class	Hazard category	Conditions for use	Explanation/Justification
(1)	(2)	(3)	(4)	(5)	
					normally indicates a choice between two or more phrases. Proposal to move category 1 from below (no separate lines are needed): Category 1 is added here and deleted below. Proposal to delete self-reactives and organic peroxides: The wording of P220 (even in its original form) aims at oxidizing properties (the need to keep away from clothing applies only to oxidizers). Since self-reactives and organic peroxides do not have oxidizing properties this statement is not as appropriate as e.g. P420. P220 therefore should be removed for self-reactives and organic peroxides.
		Oxidizing liquids (chapter 2.13)	1	- specify to keep away from clothing and other	Proposal to move category 1 from here to category 2 and 3
		Oxidizing solids (chapter 2.14)	1	combustible materials.	above (see above).
P221	Take any precaution to avoid	Oxidizing liquids (chapter 2.13)	1, 2, 3	Manufacturer/supplier or	Proposal to delete P221:
	mixing with combustibles/	Oxidizing solids (chapter 2.14)	1, 2, 3	the competent authority to specify other incompatible materials.	P221 is redundant because the information is contained in P220 which applies to all categories of oxidizers.

Code	Prevention precautionary statements	Hazard class	Hazard category	Conditions for use	Explanation/Justification
(1)	(2)	(3)	(4)	(5)	
P222	Do not allow contact with air.	Pyrophoric liquids (chapter 2.9) Pyrophoric solids (chapter 2.10)	1	- if emphasis of the hazard statement is deemed necessary.	Proposal to add conditions for use: H250 "Catches fire spontaneously if exposed to air" already covers this and is always assigned.
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.	Proposal to add conditions for use: H260 "In contact with water releases flammable gases, which may ignite spontaneously" and H261 "In contact with water releases flammable gas" already cover this and are always assigned.
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 reduce or suppress their explosive properties (desensitized explosives). Manufacturer/supplier or the competent authority to specify appropriate material. - if drying out increases explosion hazard, except as needed for manufacturing or operating processes (e.g. nitrocellulose).	Proposal to amend the conditions for use: "Normal" explosives are not wetted and therefore this statement would not apply to them. It has to be clarified that this statement applies only to desensitized explosives. NOTE: may need to be revisited once work on desensitised explosives is complete.

(1)	(2)	(3)	(4)	(5)	
P231	Handle <u>and store contents</u> under inert gas/	Pyrophoric liquids (chapter 2.9) Pyrophoric solids (chapter 2.10)	<u>1</u> <u>1</u>	Manufacturer/supplier or the competent authority to specify appropriate liquid or gas if "inert gas" is not appropriate.	Proposal to amend the wording of the statement: More clear and specifies that the appropriate liquid or gas has to be specified if inert gas
		Substances and mixtures which, in contact with water, emit flammable gases (chapter 2.12)	1, 2, 3	- 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.	is not sufficient (e.g. white phosphorous under water) Proposal to add pyrophoric liquids and solids: Necessary, especially if to be handled under something else than inert gas. Proposal to add conditions for use: An explanation is needed what is expected to add for the dots.
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	- if the liquid is volatile and may generate an explosive atmosphere.	Proposal to amend the conditions for use: The term "product" is not used in the GHS and the statement applies to liquids only. Explosive atmosphere is more specific than hazardous atmosphere, because the conditions for use only apply to flammable liquids.
		Pyrophoric liquids (chapter 2.9)	<u>1</u>		Proposal to add pyrophoric

Hazard

category

Conditions for use

Explanation/Justification

liquids and solids:

Hazard class

Pyrophoric solids (chapter 2.10)

Code

Prevention precautionary

statements

Code	Prevention precautionary statements	Hazard class	Hazard category	Conditions for use	Explanation/Justification
(1)	(2)	(3)	(4)	(5)	
					Obviously highly appropriate (in order to avoid ignition of the pyrophoric substance upon contact with air).
		Acute toxicity, inhalation (chapter 3.1)	1, 2, 3	- if <u>the product chemical</u> is volatile so as to <u>and may</u>	Proposal to amend condition for use:
		Specific target organ toxicity, single exposure; respiratory tract irritation (chapter 3.8)	3	generate <u>a</u> hazardous atmosphere.	To make the wording consistent with the amended condition for flammable
		Specific target organ toxicity, single exposure; narcotic effects (chapter 3.8)	3		liquids proposed above.
P234	Keep only in original container packaging.	Explosives (chapter 2.1)	Divisions 1.1, 1.2, 1.3, 1.4, 1.5		Proposal to amend the wording of the statement: "Packaging" is the
		Self-reactive substances and mixtures (chapter 2.8)	Types A, B, C, D, E, F		terminology used in transport. And the reason for assigning P234 to explosives,
		Organic peroxides (chapter 2.15)	Types A, B, C, D, E, F		self-reactives and organic peroxides is that the classifi- cation is dependent on the
		Substances and mixtures eCorrosive to metals (chapter 2.16)	1		(transport) packaging, and changing the packaging could substantially increase the hazard.
					Proposal to add explosives: Classification is packaging dependent.
					Proposal to amend the name of the hazard class for corrosive to metals:
					In line with the actual name of the hazard class.

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Code	Prevention precautionary statements	Hazard class	Hazard category	Conditions for use	Explanation/Justification
(1)	(2)	(3)	(4)	(5)	
	Keep cool.	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.	Proposal to delete category 4: Flash point is above 60 °C, therefore the statement is not necessary for this category 4. Proposal to add conditions for use: Clarification for which substances the statement is most appropriate.
		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.	Proposal to add precedence rule P411 requires storage at specific temperatures, so is more precise than P235 and makes it redundant.
		Self-heating substances and mixtures (chapter 2.11)	1, 2	- may be omitted if P413 is given on the label.	Proposal to add precedence rule P413 gives more precise instructions regarding storage temperatures so makes P235 redundant.
		Organic peroxides (chapter 2.15)	Types A, B, C, D, E, F	- may be omitted if P411 is given on the label.	Proposal to add precedence rule P411 requires storage at specific temperatures, so is more precise than P235 and makes it redundant.

Code	Prevention precautionary statements	Hazard class	Hazard category	Conditions for use	Explanation/Justification
(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	- if the explosive is electrostatically sensitive.	Proposal to re-word precautionary statement to say 'ground and bond'. Here the slash is inappropriate because the intention is that both 'ground' and 'bond' appear on the label. Both precautions should generally be taken, so the wording should be 'ground and bond'.
		Flammable liquids (chapter 2.6)	1, 2, 3	 if electrostatically sensitive material is for reloading. if product the liquid is volatile so as to and may generate hazardous an explosive atmosphere. 	Proposal to amend the conditions for use for flammable liquids: More appropriate and specific.
		Flammable solids (chapter 2.7)	1, 2	- if <u>the solid is</u> electrostatically sensitive material is for reloading .	Proposal to amend the conditions for use for flammable solids: More appropriate
		Self-reactive substances and mixtures (chapter 2.8) Organic peroxides (chapter 2.15)	Types A, B, C, D, E, F Types A, B, C, D, E, F	- if electrostatically sensitive and able to generate an explosive atmosphere	Proposal to add self-reactives and organic peroxides: Appropriate for self-reactives and organic peroxides as well under the respective conditions for use.

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Code	Prevention precautionary statements	Hazard class	Hazard category	Conditions for use	Explanation/Justification
(1)	(2)	(3)	(4)	(5)	
P241	Use explosion-proof [electrical/ventilating/lighting//] equipment.	Flammable liquids (chapter 2.6) Flammable solids (chapter 2.7)	1, 2, 3	the competent authority to specify other equipment. if the liquid is volatile and may generate and explosive atmosphere. may be omitted where local or national legislation introduces more specific provisions. text in square brackets may be used to specify specific electrical, ventilating, lighting or other equipment if necessary and as appropriate. Manufacturer/supplier or the competent authority to specify other equipment. if dust clouds can occur. may be omitted where local or national legislation introduces more specific provisions. text in square brackets may be used to specify specific electrical, ventilating, lighting or other equipment if necessary and as appropriate.	Proposal to amend the wording of the statement: Explosion proof equipment includes ventilating, lighting etc. Therefore "Use explosion-proof equipment" normally is sufficient. However, some countries might be of the opinion that this should be further elaborated. The statement therefore can amended by adding specific equipment such as electrical, ventilating or lighting equipment (dots added). However, the slash is still appropriate because the manufacturer/supplier should choose which specific type of equipment to mention in the statement. Proposal to amend the conditions for use: More specific for which flammable liquids this statement applies. In addition it is pointed out that - if more specific provisions exist - this statement is not necessary and could be misleading because it may not fully correspond to local/national requirements.

Code	Prevention precautionary statements	Hazard class	Hazard category	Conditions for use	Explanation/Justification
(1)	(2)	(3)	(4)	(5)	
P242	Use only 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 disulfide).	Proposal to add conditions for use: In principle we think this statement is not needed with regard to labelling of chemicals and therefore would prefer its deletion. It has a very limited applicability, see left. Moreover, P242 is covered by P241 (non-sparking tools are specific equipment which then could be mentioned in P241). However, if not deleted, the conditions for use should be as specific as possible.
P243	Take precautionary measures againstaction 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. 	Proposal to amend the wording of the statement: Shorter and clearer. Proposal to add conditions for use: More specific for which flammable liquids this statement applies. In addition it is pointed out that - if more specific provisions exist - this statement is not necessary and could be misleading because it may not fully correspond to local/national requirements.

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Code	Prevention precautionary statements	Hazard class	Hazard category	Conditions for use	Explanation/Justification
(1)	(2)	(3)	(4)	(5)	
P244	Keep valves and fittings free from oil and grease.	Oxidizing gases (chapter 2.4)	1		
		<u> </u>	1	T	
P250	Do not subject to grinding/shock//friction	Explosives (chapter 2.1)	1.4, 1.5	- if the explosive is mechanically sensitive Manufacturer/supplier or the competent authority to specify applicable rough handling.	Proposal to add unstable explosives: Applies just as for the other divisions. Proposal to amend the conditions for use: Clarification that this statement applies only if the explosive is mechanically sensitive. handling. Proposal to move the '' To make clear that the manufacturer/supplier should choose between grinding, shock, friction, and/or any other form of rough handling. The slash is appropriate because the manufacturer/supplier should choose between "grinding", "shock", etc. – so no change proposed.
P251	Do not pierce or burn, even after use.	Aerosols (chapter 2.3)	1, 2, 3		

Code	Prevention precautionary statements	Hazard class	Hazard category	Conditions for use	Explanation/Justification
(1)	(2)	(3)	(4)	(5)	
P260	Do not breathe dust/fume/gas/mist/vapours/	Acute toxicity – inhalation (chapter 3.1)	1, 2	Manufacturer/supplier or the competent authority to	Slash is appropriate because manufacturer/supplier or the
	spray.	Specific target organ toxicity, single exposure (chapter 3.8)	1, 2	specify applicable conditions.	competent authority should choose the applicable words.
		Specific target organ toxicity, repeated exposure (chapter 3.9)	1, 2		
		Skin corrosion (chapter 3.2)	1A, 1B, 1C	- specify do not breathe	
		Reproductive toxicity – effects on or via lactation (chapter 3.7)	Additional category	dusts or mists - if inhalable particles of dusts or mists may occur during use. - specify do not breathe dusts or mists	
P261	Avoid breathing dust/fume/gas/mist/vapours/	Acute toxicity – inhalation (chapter 3.1)	3, 4	– may be omitted if P260 is given on the label.	Slash is appropriate because manufacturer/supplier or the competent authority should choose the applicable words.
	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		Proposal to re-word The manufacturer/supplier or competent authority in this case is not supposed to choose whether to include the text 'during pregnancy' or

Code	Prevention precautionary statements	Hazard class	Hazard category	Conditions for use	Explanation/Justification
(1)	(2)	(3)	(4)	(5)	
					'while nursing' – both should be included.
P264	Wash thoroughly after	Acute toxicity – oral (chapter 3.1)	1, 2, 3, 4	Manufacturer/supplier or	
	handling.	Acute toxicity – dermal (chapter 3.1)	1, 2	the competent authority to specify parts of the body to	
		Skin corrosion (chapter 3.2)	1A, 1B, 1C	be washed after handling.	
		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	
		Specific target organ toxicity, repeated exposure (chapter 3.9)	1	specify parts of the body to be washed after handling.	
P270	Do not eat, drink or smoke when	Acute toxicity – oral (chapter 3.1)	1, 2, 3, 4		
	using this 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 wellventilated 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		

Code	Prevention precautionary statements	Hazard class	Hazard category	Conditions for use	Explanation/Justification
(1)	(2)	(3)	(4)	(5)	
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	- if this is not the intended use.	
		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.	Explosives (chapter 2.1)	Unstable explosives and divisions 1.1, 1.2, 1.3, 1.4, 1.5	- Specify face protection. Manufacturer/supplier or the competent authority to specify the appropriate type of equipment. - Specify protective gloves and eye/face protection. Manufacturer/supplier or the competent authority to specify type of equipment.	Slash is appropriate because manufacturer/supplier or the competent authority should choose which phrase is appropriate. Proposal to add unstable explosives: Applies just as for the other divisions. Proposal to amend the conditions for use: Face protection is not always appropriate, appropriate protection should rather be specified.
		Flammable liquids (chapter 2.6)	1, 2, 3, 4		Proposal to amend the conditions for use:
		Flammable solids (chapter 2.7) Self-reactive substances and mixtures (chapter 2.8)	1, 2 Types A, B, C, D, E, F		Appropriate protection should be specified.
		Pyrophoric liquids (chapter 2.9)	1		
		Pyrophoric solids (chapter 2.10)	1		
		Self-heating substances and mixtures	1, 2		

Code	Prevention precautionary statements	Hazard class	Hazard category	Conditions for use	Explanation/Justification	
(1)	(2)	(3)	(4)	(5)		
		(chapter 2.11)				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			
		Acute toxicity – dermal (chapter 3.1)	1, 2, 3, 4	- Specify protective gloves/clothing. Manufacturer/supplier or the competent authority to specify the appropriate type of equipment.		
		Skin corrosion (chapter 3.2)	1A, 1B, 1C	- Specify protective gloves/clothing and eye/face protection. Manufacturer/supplier or the competent authority to specify the appropriate type of equipment.		
		Skin irritation (chapter 3.2)	2	- Specify protective gloves.		
		Skin sensitization (chapter 3.4)	1, 1A, 1B	Manufacturer/supplier or the competent authority to specify the appropriate type of equipment.		
		Severe eye damage (chapter 3.3)	1	- Specify eye/face		
		Eye irritation (chapter 3.3)	2A	protection. Manufacturer/supplier or the competent authority to specify the appropriate type of equipment.		
		Germ cell mutagenicity (chapter	1A, 1B, 2	Manufacturer/supplier or the		

Code	Prevention precautionary statements	Hazard class	Hazard category	Conditions for use	Explanation/Justification
(1)	(2)	(3)	(4)	(5)	
		3.5) Carcinogenicity (chapter 3.6) Reproductive toxicity (chapter 3.7)	1A, 1B, 2 1A, 1B, 2	competent authority to specify the appropriate type of equipment.	
P282	Wear cold insulating gloves and <u>feither</u> face shield or eye protection.	Gases under pressure (chapter 2.5)	Refrigerated liquefied gas		Proposal to re-word The manufacturer/supplier competent authority is not supposed to choose which phrase to use – all should g on the label. The correct precaution is to use cold insulating gloves, and either a face shield or eye protection.
P283	Wear fire <u>resistant for flame</u> resistant/retardant clothing.	Oxidizing liquids (chapter 2.13) Oxidizing solids (chapter 2.14)	1		Proposal to re-word: The manufacturer/supplier not supposed to choose between 'fire' and 'flame' between 'resistant' or 'retardant' – 'fire resistant flame retardant' is clearer.
P284	[In case of inadequate ventilation] wear respiratory protection.	Acute toxicity, inhalation (chapter 3.1) Respiratory sensitization (chapter 3.4)	1, 2 1, 1A, 1B	- 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.	
P231 + P232	Handle and store contents under inert gas/ Protect from moisture.	Pyrophoric liquids (chapter 2.9) Pyrophoric solids (chapter 2.10)	1	-if the substance or mixture reacts readily with moisture in air.	Consequential amendment from P231 above:

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Code	Prevention precautionary statements	Hazard class	Hazard category	Conditions for use	Explanation/Justification
(1)	(2)	(3)	(4)	(5)	
		Substances and mixtures which, in	1, 2, 3	Manufacturer/supplier or the competent authority to specify appropriate liquid or gas if "inert gas" is not appropriate. - if the substance or mixture	Proposal to amend the wording of the statement: More clear and specifies that the appropriate liquid or gas has to be specified if inert gas is not sufficient (e.g. white phosphorous under water)
		contact with water, emit flammable gases (chapter 2.12)	1, 2, 3	reacts readily with moisture in air Manufacturer/supplier or the competent authority to specify appropriate liquid or gas if "inert gas" is not appropriate.	Proposal to add pyrophoric liquids and solids: Necessary especially if to be handled under something else than inert gas. Proposal to add conditions for use: An explanation is needed of what to add in place of the dots.
P235 + P410	Keep cool. Protect from sunlight.	Self heating substances and mixtures (chapter 2.11)	1,2	May be omitted if P413 is given on the label	Proposal to delete this combined precautionary statement: It is proposed above to add a new condition for P235 for certain hazard categories ("-may be omitted if P411 is given on the label"). However this does not apply to P410 (Protect from sunlight). Therefore it is clearer to delete this combined statement and include the P235 and P410 separately under Prevention and Storage respectively so that the appropriate

Code	Prevention precautionary statements	Hazard class	Hazard category	Conditions for use	Explanation/Justification
(1)	(2)	(3)	(4)	(5)	
					conditions of use can be applied.

Table A3.2.3: Codification of response precautionary statements

Code	Response precautionary statements	Hazard class	Hazard category	Conditions for use	Explanation/Justification
(1)	(2)	(3)	(4)	(5)	
P301	IF SWALLOWED:	Acute toxicity, oral (chapter 3.1)	1, 2, 3, 4		
		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		
		Substances and mixtures which, in contact with water, emit flammable gases (chapter 2.12)	<u>1</u> ,2		Proposal to add pyrophoric solids: Pyrophoric solids have to be added because they have P335 + P334 assigned which need to be combined with if "on skin:". Proposal to add water-reactives, cat. 1 and 2: Water-reactives cat. 1 and 2 have to be added because they have P335 + P334 assigned which need to be combined with if "on skin:".
		Acute toxicity, dermal (chapter 3.1)	1, 2, 3, 4		
		Skin irritation (chapter 3.2)	2		
		Skin sensitization (chapter 3.4)	1, 1A, 1B		

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Code	Response precautionary statements	Hazard class	Hazard category	Conditions for use	Explanation/Justification
(1)	(2)	(3)	(4)	(5)	
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		
		Severe 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		
P310	Immediately call a POISON	Acute toxicity, oral (chapter 3.1)	1, 2, 3	Manufacturer/supplier or	No change – the
	CENTER/doctor/	Acute toxicity, dermal (chapter 3.1)	1, 2	the competent authority to specify the appropriate	manufacturer/supplier or the competent authority should
		Acute toxicity, inhalation (chapter 3.1)	1, 2	source of emergency medical advice.	separated by slash in this case.

Code	Response precautionary statements	Hazard class	Hazard category	Conditions for use	Explanation/Justification
(1)	(2)	(3)	(4)	(5)	
		Skin corrosion (chapter 3.2)	1A, 1B, 1C		
		Severe 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 authority to	
		Respiratory sensitization (chapter 3.4)	1, 1A, 1B	specify the appropriate source of emergency medical	
		Specific target organ toxicity, single exposure (chapter 3.8)	1, 2	advice.	
P312	Call a POISON	Acute toxicity, oral (chapter 3.1)	4	Manufacturer/supplier or	
	CENTER/doctor//if you feel	Acute toxicity, oral (chapter 3.1)	5	the competent authority to	
	unwell.	Acute toxicity, dermal (chapter 3.1)	3, 4, 5	specify the appropriate source of emergency medical advice.	
		Acute toxicity, inhalation (chapter 3.1)	4		
		Acute toxicity, inhalation (chapter 3.1)	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		Proposal to re-word:
		Eye irritation (chapter 3.3)	2A, 2B		The slash is unnecessary here
		Skin sensitization (chapter 3.4)	1, 1A, 1B		and the precaution is adequately
		Germ cell mutagenicity (chapter 3.5)	1A, 1B, 2		covered by the word 'advice'.
		Carcinogenicity (chapter 3.6)	1A, 1B, 2		
		Reproductive toxicity (chapter 3.7)	1A, 1B, 2		

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Code	Response precautionary statements	Hazard class	Hazard category	Conditions for use	Explanation/Justification
(1)	(2)	(3)	(4)	(5)	
		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		Proposal to re-word: See P313 above
P315	Get immediate medical advice /attention .	Gases under pressure (chapter 2.5)	Refrigerated liquefied gas		Proposal to re-word: See P313 above
P320	Specific treatment is urgent (see on this label).	Acute toxicity, inhalation (chapter 3.1)	1, 2	- if immediate administration of antidote is required Reference to supplemental first aid instruction.	
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	 - if immediate measures such as specific cleansing agent is advised. Reference to supplemental first aid instruction. 	
		Acute toxicity, inhalation (chapter 3.1)	3	- if immediate specific measures are required Reference to supplemental first aid instruction.	
		Skin corrosion (chapter 3.2)	1A, 1B, 1C	Manufacturer/supplier or	
		Skin irritation (chapter 3.2)	2	competent authority may	

Code	Response precautionary statements	Hazard class	Hazard category	Conditions for use	Explanation/Justification
(1)	(2)	(3)	(4)	(5)	
		Skin sensitization (chapter 3.4)	1, 1A, 1B	specify a cleansing agent if appropriate Reference to supplemental first aid instruction.	
		Specific target organ toxicity, single exposure (chapter 3.8)	1	 - if immediate measures are required. Reference to supplemental first aid instruction. 	
P330	Rinse mouth.	Acute toxicity, oral (chapter 3.1)	1, 2, 3, 4		
		Skin corrosion (chapter 3.2)	1A, 1B, 1C		
P331	Do NOT induce vomiting.	Skin corrosion (chapter 3.2)	1A, 1B, 1C		
		Aspiration hazard (chapter 3.10)	1, 2		
P332	If skin irritation occurs:	Skin irritation (chapter 3.2)	2, 3		
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) Pyrophoric solids (chapter 2.10)	1	- text in square brackets to be used for pyrophoric liquids and solids.	Proposal to re-word and add condition for use: For these hazard classes the manufacturer/supplier or competent authority should not choose between 'immerse in cool water' and 'wrap in wet bandages' – both options should appear on the label. However use of square brackets is suggested, since for water-reactives, only 'immerse in cool water' is appropriate (see below).

Code	Response precautionary	Hazard class	Hazard	Conditions for use	Explanation/Justification
<i>(</i> 4)	statements		category		
(1)	(2)	(3)	(4)	(5)	
		Substances and mixtures which,	1, 2	- Use only "Immerse in cool	Proposal to amend the
		in contact with water, emit flammable gases (chapter 2.12)		water." Text in square brackets should not be used.	conditions for use for water- reactives
		manimable gases (chapter 2.12)		brackets should not be used.	A lot of water (for which wet
					bandages are not enough) is
					needed in order to be safe
					because otherwise the heat of
					reaction will cause a problem.
P335	Brush off loose particles from	Pyrophoric solids (chapter 2.10)	1		
	skin.	Substances and mixtures which,	1, 2		
		in contact with water, emit			
D22.5		flammable gases (chapter 2.12)	D 61		
P336	Thaw frosted parts with lukewarm water. Do not rub	Gases under pressure (chapter 2.5)	Refrigerated liquefied gas		
	affected area.	[2.3)	ilqueiled gas		
P337	If eye irritation persists:	Eye irritation (chapter 3.3)	2A, 2B		
P338	Remove contact lenses, if	Skin corrosion (chapter 3.2)	1A, 1B, 1C		
	present and easy to do.	Severe eye damage (chapter 3.3)	1		
	Continue rinsing.	Eye irritation (chapter 3.3)	2A, 2B		
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,	3		
		single exposure; respiratory tract irritation (chapter 3.8)			
		Specific target organ toxicity, single exposure; narcotic effects	3		
		(chapter 3.8)			
P342	If experiencing respiratory symptoms:	Respiratory sensitization (chapter 3.4)	1, 1A, 1B		
P351	Rinse cautiously with water for	Skin corrosion (chapter 3.2)	1A, 1B, 1C		

Code	Response precautionary statements	Hazard class	Hazard category	Conditions for use	Explanation/Justification
(1)	(2)	(3)	(4)	(5)	
	several minutes.	Severe 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 authority may	No amendment needed because manufacturer/supplier or the
		Skin irritation (chapter 3.2)	2	specify a cleansing agent if	competent authority should
		Skin sensitization (chapter 3.4)	1, 1A, 1B	appropriate, or may recommend an alternative agent in exceptional cases if water is clearly inappropriate.	choose the applicable cleansing agent.
P353	Rinse skin with water for shower.	Flammable liquids (chapter 2.6)	1, 2, 3	- text in square brackets to be included where the manufacturer/supplier or the competent authority consider it appropriate for the specific chemical.	Proposal to put the word 'shower' in square brackets. The reference to 'water' is sufficient in most cases but for some chemical exposures a deluge shower might be appropriate. Use of square brackets allows the manufacturer/supplier or the competent authority to choose the appropriate wording for the specific chemical in question, see para A3.2.3.7 of the GHS.
D2.60	D: : 1: 4 1	Skin corrosion (chapter 3.2)	1A, 1B, 1C		
P360	Rinse immediately contaminated clothing and skin with plenty of water before removing clothes.	Oxidizing liquids (chapter 2.13) Oxidizing solids (chapter 2.14)	1		
P361	Take off immediately all	Flammable liquids (chapter 2.6)	1, 2, 3		
	contaminated clothing.	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		

Code	Response precautionary statements	Hazard class	Hazard category	Conditions for use	Explanation/Justification
(1)	(2)	(3)	(4)	(5)	
		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		
P370	In case of fire:	Explosives (chapter 2.1)	Unstable explosives and Ddivisions 1.1, 1.2, 1.3, 1.4, 1.5		Proposal to add unstable explosives: Needed for combination with P380 just as for the other explosives divisions.
		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		Proposal to add organic peroxides: In analogy to self-reactives (they have the same hazard).
P371	In case of major fire and large	Oxidizing liquids (chapter 2.13)	1		

Code	Response precautionary statements	Hazard class	Hazard category	Conditions for use	Explanation/Justification
(1)	(2)	(3)	(4)	(5)	
	quantities:	Oxidizing solids (chapter 2.14)	1		
P372	Explosion risk, in case of fire.	Explosives (chapter 2.1)	Unstable explosives and Divisions 1.1, 1.2, 1.3 and, 1.4, 1.5 Division 1.4	except if explosives are 1.48 AMMUNITION AND COMPONENTS THEREOF. - except for explosives of division 1.4 (compatibility group S) in transport packaging.	Proposal to amend the text of the statement: As P370 "In case of fire" is assigned anyway it can conveniently be combined with "Explosion risk" instead of "Explosion risk in case of fire" (see below the combination statements). Proposal to amend conditions for use for Division 1.4: Division 1.4 (compatibility group S) is only assigned if there are no hazardous effects outside the package (see also Figure 2.3 of the GHS). Therefore this precautionary statement is not necessary for explosives classified in this way.
		Self-reactive substances and mixtures (chapter 2.8) Organic peroxides (chapter 2.15)	Type A Type A		Proposal to add self-reactives and organic peroxides, Type A: Must have been omitted originally (same hazard as unstable explosives). Needed for combination of P370 + P380 + P372 + P373 as proposed
P373	DO NOT fight fire when fire reaches explosives.	Explosives (chapter 2.1)	Unstable explosives and Divisions 1.1, 1.2, 1.3, 1.4 and 1.5		below.

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Annex 2	UN/SCEGHS/24/INF.5

Code	Response precautionary statements	Hazard class	Hazard category	Conditions for use	Explanation/Justification
(1)	(2)	(3)	(4)	(5)	
			Division 1.4	- except for explosives of division 1.4 (compatibility group S) in transport packaging.	Proposal to add conditions for use: Division 1.4S is only assigned if there are no hazardous effects outside the package (see also Figure 2.3 of the GHS) so that a fire can be fought. Therefore P375 is more appropriate for 1.4S – if in the transport packaging (see below).
		Self-reactive substances and mixtures (chapter 2.8) Organic peroxides (chapter 2.15)	Type A Type A		Proposal to add self-reactives and organic peroxides, Type A: Must have been omitted originally (same hazard as unstable explosives). Needed for combination of P370 + P380 + P372 + P373 as proposed below.
P374	Fight fire with normal precautions from a reasonable distance.	Explosives (chapter 2.1)	Division 1.4	— if explosives are 1.48 AMMUNITION AND COMPONENTS THEREOF.	Proposal to move division 1.4 to P375: P375 is more appropriate (and cautious) than P374 because reference to an explosion risk should be maintained for class 1 substances (even for division 1.4S), which is not mentioned when using P374.

Code	Response precautionary statements	Hazard class	Hazard category	Conditions for use	Explanation/Justification
(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.	Proposal to move division 1.4 from P374: P375 is more appropriate than P374 for class 1 because reference to an explosion risk should be maintained which is not mentioned when using P374 (even for division 1.4S), which is not mentioned when using P374.
		Self-reactive substances and mixtures (chapter 2.8)	Types A, B		Proposal to delete self-reactives, Type A: P373 should apply instead. It is dangerous to fight a fire of Type A substances (same hazard as unstable explosives) and should always be advised against.
		Oxidizing liquids (chapter 2.13)	1		
		Oxidizing solids (chapter 2.14)	1		
		Organic peroxides (chapter 2.15)	Type B		Proposal to add organic peroxides: In analogy to self-reactives (they have the same hazard).
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)	1, 2		

Code	Response precautionary statements	Hazard class	Hazard category	Conditions for use	Explanation/Justification
(1)	(2)	(3)	(4)	(5)	
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	
		Self-reactive substances and mixtures (chapter 2.8)	Types A, B, C, D, E, F	the competent authority to specify appropriate media	Proposal to delete self-reactives, Type A:
					P373 should apply instead. It is dangerous to fight a fire of Type A substances (same hazard as unstable explosives) and should always be advised against.
		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		Proposal to add organic peroxides:
					In analogy to self-reactives (they have the same hazard).
P380	Evacuate area.	Explosives (chapter 2.1)	Unstable explosives		
		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		
		Oxidizing liquids (chapter 2.13)	1		
		Oxidizing solids (chapter 2.14)	1		
		Organic peroxides (chapter 2.15)	Types A and B		Proposal to add organic peroxides:
					In analogy to self-reactives

Code	Response precautionary statements	Hazard class	Hazard category	Conditions for use	Explanation/Justification
(1)	(2)	(3)	(4)	(5)	
					(they have the same hazard).
P381	In case of leakage, Eeliminate all ignition sources if safe to do so.	Flammable gases (chapter 2.2)	1, 2		Proposal to add 'in case of leakage' and delete 'if safe to do so' 'In case of leakage' added because the precaution to eliminate ignition sources is important for all flammable gas leaks (where the leaking gas is not burning) since in such cases an explosive atmosphere may be generated. The qualifier 'if safe to do so' is not necessary and could discourage quick action. Elsewhere 'if safe to do so' is added because there may be a fire which could make the precaution unsafe (e.g. P370 + P376, 'In case of fire: stop leak if safe to do so'). However the precaution to eliminate all ignition sources is most important where there is a flammable gas leakage which is not burning and there is no fire that might hinder elimination of possible ignition sources.
P390	Absorb spillage to prevent material-damage.	Substances and mixtures eCorrosive to metals (chapter 2.16)	1		Proposal to amend the name of the hazard class for corrosive to metals: In line with the actual name of the hazard class.

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Annex 2	EGHS/24/INF.5

Code	Response precautionary statements	Hazard class	Hazard category	Conditions for use	Explanation/Justification
(1)	(2)	(3)	(4)	(5)	
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		
P301	IF SWALLOWED:	Acute toxicity, oral (chapter 3.1)	1, 2, 3	Manufacturer/supplier or	
P310	Immediately call a POISON CENTER/doctor/	Aspiration hazard (chapter 3.10)	1, 2	the competent 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	Manufacturer/supplier or the competent authority to specify the appropriate source of emergency medical advice.	
P301 + P330 + P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.	Skin corrosion (chapter 3.2)	1A, 1B, 1C		
P302 + P334	IF ON SKIN: Immerse in cool water <u>[or/</u> wrap in wet bandages].	Pyrophoric liquids (chapter 2.9)	1	- text in square brackets to be used for pyrophoric liquids and solids.	
<u>P302</u> ± P335	IF ON SKIN: Brush off loose particles from skin. Immerse in cool water or wrap in wet	Pyrophoric solids (chapter 2.10)	1	- text in square brackets to be used for pyrophoric liquids and solids.	Consequential amendment: See above the justification for P302 and for P334.
+ P334	bandages].	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.	

Code	Response precautionary statements	Hazard class	Hazard category	Conditions for use	Explanation/Justification
(1)	(2)	(3)	(4)	(5)	
P302 +	IF ON SKIN: Wash with plenty of water/	Acute toxicity, dermal (chapter 3.1)	1, 2, 3, 4	Manufacturer/supplier or the competent authority may	
P352		Skin irritation (chapter 3.2)	2	specify a cleansing agent if	
		Skin sensitization (chapter 3.4)	1, 1A, 1B	appropriate, or may recommend an alternative agent in exceptional cases if water is clearly inappropriate.	
P303	IF ON SKIN (or hair): Take	Flammable liquids (chapter 2.6)	1, 2, 3	- text in square brackets to	Consequential amendment: see
+ P361 + P353	off immediately all contaminated clothing. Rinse skin with water <u>[or /shower]</u> .	Skin corrosion (chapter 3.2)	1A, 1B, 1C	be included where the manufacturer/supplier or the competent authority consider it appropriate for the specific chemical.	above justification for P353.
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		
P340	comfortable for breathing.	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: Rinse cautiously	Skin corrosion (chapter 3.2)	1A, 1B, 1C		
+	with water for several minutes.	Severe eye damage (chapter 3.3)	1		

Code	Response precautionary statements	Hazard class	Hazard category	Conditions for use	Explanation/Justification
(1)	(2)	(3)	(4)	(5)	
P351 + P338	Remove contact lenses, if present and easy to do. Continue rinsing.	Eye irritation (chapter 3.3)	2A, 2B		
P306	IF ON CLOTHING: Rinse	Oxidizing liquids (chapter 2.13)	1		
P360	immediately 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 / attention .	Germ cell mutagenicity (chapter 3.5)	1A, 1B, 2		Proposal to re-word: See P313 above.
P313		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		
P332 + P313	If skin irritation occurs: Get medical advice/attention.	Skin irritation (chapter 3.2)	2, 3	- may be omitted when P333+P313 appears is given on the label.	Proposal to re-word: See P313 above.
P333 + P313	If skin irritation or rash occurs: Get medical advice /attention .	Skin sensitization (chapter 3.4)	1, 1A, 1B		Proposal to re-word: See P313 above.
P336 ± P315	Thaw frosted parts with lukewarm water. Do not rub affected area. Get immediate medical advice.	Gases under pressure (chapter 2.5)	Refrigerated liquefied gas		No change, just a new combination because P315 "Get immediate medical advice" has to follow something.
P337 + P313	If eye irritation persists: Get medical advice/attention.	Eye irritation (chapter 3.3)	2A, 2B		Proposal to re-word: See P313 above.

Code	Response precautionary statements	Hazard class	Hazard category	Conditions for use	Explanation/Justification
(1)	(2)	(3)	(4)	(5)	
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 reuse.	Acute toxicity, dermal (chapter 3.1)	4		
P364		Skin irritation (chapter 3.2)	2		
		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	Flammable liquids (chapter 2.6)	1, 2, 3, 4	- if water increases risk.	
+	extinguish.	Flammable solids (chapter 2.7)	1, 2	Manufacturer/supplier or	
P378		Self-reactive substances and mixtures (chapter 2.8)	Types A, B, C, D, E, F	the competent authority to specify appropriate media.	Consequential amendment: See above the justification for P378 Type B removed because this is covered by the new combination statement P370 + P380 + P375 + P378 (see below)
		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		

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Code	Response precautionary statements	Hazard class	Hazard category	Conditions for use	Explanation/Justification
(1)	(2)	(3)	(4)	(5)	
		Organic peroxides (chapter 2.15)	Types B, C, D, E, F		Consequential amendment: See above the justification for P378. Type B removed because this is covered by the new combination statement P370 + P380_+ P375 + P378 (see below)
P370 ± P372 + P380 ± P373	In case of fire: Explosion risk. Evacuate area. Do NOT fight fire when fire reaches explosives.	Explosives (chapter 2.1)	Unstable explosives and Ddivisions 1.1, 1.2, 1.3, 1.4, 1.5	- except for explosives of division 1.4(compatibility group S) in transport packaging	Consequential amendment: See above the justification for P370, P372, P373 and P380: This combination would replace P370 + P380 and combines all the response PS for these categories which apply in case of fire. It avoids saying 'in case of fire' twice.
		Self-reactive substances and mixtures (chapter 2.8) Organic peroxides (chapter 2.15)	Type A		
P370 + P380 +	In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion.	Explosives (chapter 2.1) Self reactive substances and	Type A Division 1.4 Types A, B	- for explosives of division 1.4 (compatibility group S) in transport packaging	Consequential amendment: See above justification for P375. Deletion of self-reactives and organic peroxides, since the
P375		mixtures (chapter 2.8) Organic peroxides (chapter 2.15)	Type B		precaution is covered by the proposed new combination statement P370 + P380 + P375 + P378 (see below).
P371	In case of major fire and large	Oxidizing liquids (chapter 2.13)	1		
+ P380 + P375	quantities: Evacuate area. Fight fire remotely due to the risk of explosion.	Oxidizing solids (chapter 2.14)	1		

Code	Response precautionary statements	Hazard class	Hazard category	Conditions for use	Explanation/Justification
(1)	(2)	(3)	(4)	(5)	
P370 ± P380 ± P375 ± P378	In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion. [Useto extinguish.]	Self-reactive substances and mixtures (chapter 2.8) Organic peroxides (chapter 2.15)	Type B Type B	- text in square brackets to be used if water increases riskManufacturer/supplier or the competent authority to specify appropriate media	Proposal for new combination statement and condition for use: Currently there is duplication because we have P370 + P378 "In case of fire: Use to extinguish", and P370 + P380 + P375 "In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion" – i.e. 'In case of fire' occurs twice. The same precaution can be expressed more economically using a single combination statement as shown. The correct condition for 'Use to extinguish' is preserved using square brackets and an appropriate condition for use.

Table A3.2.4: Codification of storage precautionary statements

Code	Storage precautionary statements	Hazard class	Hazard category	Conditions for use	Explanation/Justification
(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 in accordance with local/regional/ national/international regulations-(to be specified). as 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)	1, 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.	Proposal to add conditions for use: Clarification for which substances the statement is most appropriate.

Code	Storage precautionary statements	Hazard class	Hazard category	Conditions for use	Explanation/Justification
(1)	(2)	(3)	(4)	(5)	
		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 peroxides because condensation and	Proposal to add conditions for use: Clarification for which substances the statement is not appropriate.
		Organic peroxides (chapter 2.15)	Types A, B, C, D, E, <u>F</u>	consequent freezing may take place.	Proposal to add organic peroxides: In analogy to self-reactives (they have the same hazard).
		Acute toxicity, inhalation (chapter 3.1)	1, 2, 3	- if product is volatile so as to generate hazardous	
		Specific target organ toxicity, single exposure; respiratory tract irritation (chapter 3.8)	3	atmosphere.	
		Specific target organ toxicity, single exposure; narcotic effects (chapter 3.8)			
P404	Store in a closed container.	Substances and mixtures which, in contact with water, emit flammable gases (chapter 2.12)	1, 2, 3		
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		

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Code	Storage precautionary statements	Hazard class	Hazard category	Conditions for use	Explanation/Justification
(1)	(2)	(3)	(4)	(5)	
		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 corrosive resistant/ container with a resistant inner liner.	Substances and mixtures eCorrosive to metals (chapter 2.16)	1	- may be omitted if P234 is given on the label Manufacturer/supplier or the competent authority to specify other compatible materials.	Proposal to amend the text of the statement: Technically correct wording. No further amendment needed to the slash since manufacturer/supplier or competent authority should choose between "corrosive resistant container" and some other appropriate formulation Proposal to amend the name of the hazard class for corrosive to metals: In line with the actual name of the hazard class. Proposal to add a precedence rule Since the statement is redundant if P234 (Keep only in original container) is already assigned.

Code	Storage precautionary statements	Hazard class	Hazard category	Conditions for use	Explanation/Justification
(1)	(2)	(3)	(4)	(5)	
P407	Maintain air gap between stacks or /pallets.	Self-heating substances and mixtures (chapter 2.11)	1, 2		Proposal to re-word: Manufacturer/supplier or the competent authority should include all wording on the label and should not choose between 'stacks' or 'pallets'.
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		Proposal to add self- reactives: In analogy to organic peroxides (they have the same hazard).
		Organic peroxides (chapter 2.15)	Types A, B, C, D, E, F		

Code	Storage precautionary statements	Hazard class	Hazard category	Conditions for use	Explanation/Justification
(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	section 2.8.2.3 or 2.15.2.3 of	Proposal to amend the conditions for use: Generally only necessary if
		Organic peroxides (chapter 2.15)	Types A, B, C, D, E, F	the GHS) or if otherwise deemed necessary Manufacturer/supplier or the competent authority to specify temperature using applicable temperature scale.	temperature control is needed/required. Proposal to add condition for use: Use of the slash is appropriate because manufacturer/supplier should use the temperature scale that is applicable in the region to which they are supplying. Suggestion to add a condition of use to clarify this.
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 Manufacturer/supplier or the competent authority to specify mass and temperature using applicable scale.	
P420	Store away from other materials <u>separately</u> .	Self-reactive substances and mixtures (chapter 2.8)	Types A, B, C, D, E, F		Proposal to amend the statement:

Code	Storage precautionary statements	Hazard class	Hazard category	Conditions for use	Explanation/Justification
(1)	(2)	(3)	(4)	(5)	
		Self-heating substances and mixtures (chapter 2.11)	1, 2		Shorter and more appropriate.
		Oxidizing liquids (chapter 2.13)	<u>1</u>		Proposal to add oxidizing liquids and oxidizing solids
		Oxidizing solids (chapter 2.14)	<u>1</u>		category 1:
		Organic peroxides (chapter 2.15)	Types A, B, C, D, E, F		Oxidizers of cat. 1 are not compatible with other chemicals and it is essential to store them separately.
P422	Store contents under	Pyrophoric liquids (chapter 2.9)	1	Manufacturer/supplier or	Proposal to delete P422:
		Pyrophoric solids (chapter 2.10)	4	the competent authority to specify appropriate liquid or inert gas.	If P231 is amended as proposed above, it covers handling and storage and P422 is not necessary anymore (see above)
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		

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Code	Storage precautionary statements	Hazard class	Hazard category	Conditions for use	Explanation/Justification
(1)	(2)	(3)	(4)	(5)	
P403 +	Store in a well-ventilated place. Keep container tightly closed.	Acute toxicity, inhalation (chapter 3.1)	1, 2, 3	volatile so as to and may	Consequential amendment: see P233.
P233		Specific target organ toxicity, single exposure; respiratory tract irritation (chapter 3.8)	3	generate <u>a</u> 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, 4	- for flammable liquids Category 1 and other flammable liquids that are volatile and may generate an explosive atmosphere.	Proposal to add conditions for use: Clarification for which substances the statement is most appropriate.
		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	
		Organic peroxides (chapter 2.15)	Types A, B, C, D, E, F	May be omitted if P413 is given on the label	Proposal to add organic peroxides: In analogy to self-reactives (they have the same hazard).

Code	Storage precautionary statements	Hazard class	Hazard category	Conditions for use	Explanation/Justification
(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.	Proposal to amend condition for use: Only P410 should be omitted in the conditions described; P403 should remain on the label.
P410 + P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.	Aerosols (chapter 2.3)	1, 2, 3 0	Manufacturer/supplier or the competent authority to use applicable temperature scale.	

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Code	Storage precautionary statements	Hazard class	Hazard category	Conditions for use	Explanation/Justification
(1)	(2)	(3)	(4)	(5)	
P411 + P235	Store at temperatures not exceeding °C/ °F. Keep cool.	Organic peroxides (chapter 2.15)	Types A, B, C, D, E, F	Manufacturer/supplier or the competent authority to specify temperature.	Proposal to delete the combination statement (not the individual statements): Self-reactives and organic peroxides have both statements assigned but they should not be assigned both at the same time. If temperature control is required, P411 should be assigned (then "Keep cool" is not needed) and if no temperature control is required P235 should be assigned. Therefore the combination statement can be deleted.

 Table A3.2.5: Codification of disposal precautionary statements

Code	Disposal precautionary statements	Hazard class	Hazard category	Conditions for use	Explanation/Justification																												
(1)	(2)	(3)	(4)	(5)																													
P501	Dispose of contents/container to	Explosives (chapter 2.1)	Unstable explosives and Divisions 1.1, 1.2, 1.3, 1.4, 1.5	local/regional/ national/international regulation (to be specified).	Proposal to amend the condition for use: Local or national regulations may apply to contents or container, or both.																												
		Flammable liquids (chapter 2.6)	1, 2, 3, 4	competent authority to specify whether disposal	Therefore, the option to include either word (or both)																												
		Self-reactive substances and mixtures (chapter 2.8)	Types A, B, C, D, E, F	should be retained slash. The manufacturer/suppl competent authority use the applicable v	requirements apply to should be retained v slash. The	requirements apply to should be retained slash. The	requirements apply to should be retain slash. The	requirements apply to should be ret slash. The	requirements apply to should be ret slash. The	requirements apply to should be retained to the should bear the should be retained to the should be retained to the should	requirements apply to should be retain slash. The	requirements apply to should be retain slash. The	requirements apply to should be reta slash. The	requirements apply to should be reta slash. The	requirements apply to should be ret slash. The	requirements apply to sho contents, container or both.	requirements apply to should be slash. The should be slash.	requirements apply to should be recontents, container or both.	requirements apply to should contents, container or both.	requirements apply to should be reta slash. The	requirements apply to should be retain slash. The	requirements apply to should be retain slash. The	requirements apply to should be retain slash. The	requirements apply to should be retained contents, container or both.	requirements apply to should be reta slash. The	requirements apply to should be retained contents, container or both.	requirements apply to should be retain slash. The	requirements apply to should be retain slash. The	requirements apply to should be retain slash. The	requirements apply to should be retain slash. The	requirements apply to should be retain slash. The	requirements apply to should be retain should be retain slash. The	should be retained via the
		Substances and mixtures which, in contact with water, emit flammable gases (chapter 2.12)	1, 2, 3		competent authority should use the applicable wording for the specific case.																												
		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																														
		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																														
		Skin corrosion (chapter 3.2)	1A, 1B, 1C																														
		Respiratory sensitization (chapter 3.4)	1, 1A, 1B																														
		Skin sensitization (chapter 3.4)	1, 1A, 1B																														
		Germ cell mutagenicity (chapter 3.5)	1A, 1B, 2																														

Code	Disposal precautionary statements	Hazard class	Hazard category	Conditions for use	Explanation/Justification
(1)	(2)	(3)	(4)	(5)	
		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		
		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		
	Refer to manufacturer or supplier for information on recovery or recycling	Hazardous to the ozone layer (chapter 4.2)	1		Proposal to re-word: The person labelling the chemical is not intended to choose between the words 'manufacturer' and 'supplier', but should include both since either could be contacted. The labeller is also not intended to choose between 'recovery' and 'recycling'. Rather, the label should

Code	Disposal precautionary statements	Hazard class	Hazard category	Conditions for use	Explanation/Justification
(1)	(2)	(3)	(4)	(5)	
					indicate that the user should seek information on recovery or recycling, since either might be relevant in different circumstances.

Annex 3

Tables in A3.3.5 of the GHS as amended by the proposals in documents ST/SG/AC.10/C.4/2012/19 and ST/SG/AC.10/C.4/2012/20

EXPLOSIVES (Chapter 2.1)

Symbol Exploding bomb

Hazard category Signal word Hazard statement

Unstable explosive Danger H200 Unstable explosive



Precautionary statements				
Prevention	Response	Storage	Disposal	
P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. P250 Do not subject to grinding/shock/friction/ - if the explosive is mechanically sensitiveManufacturer/supplier or the competent authority to specify applicable rough handling. P280 Wear protective gloves/protective clothing/eye protection/face protection. Wear face protection. Manufacturer/supplier or the competent authority to specify the appropriate type of equipment.	P370+P372+P380+P373 In case of fire: Explosion risk. Evacuate area. DO NOT fight fire when fire reaches explosives. P372 Explosion risk in case of fire. P373 DO NOT fight fire when fire reaches explosives. P380 Evacuate area.	P401 Store in accordance withManufacturer/supplier or the competent authority to specify in accordance with-local/regional/ national/international regulations (to be specified as applicable).	Dispose of contents/container toin 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.	

EXPLOSIVES (Chapter 2.1)

Symbol Exploding bomb

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

Precautionary statements			
Prevention	Response	Storage	Disposal
P210 Keep away from heat, hot surfaces, /sparks, /open flames/ and other ignition sourceshot surfaces. No smoking. Manufacturer/supplier or the competent authority to specify applicable ignition source(s). 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 appropriate material if drying out increases explosion hazard, except as needed for manufacturing or operating processes (e.g. nitrocellulose). P234 Keep only in original packaging. P240 Ground/and bond container and receiving equipment if the explosive is electrostatically sensitive. P250 Do not subject to grinding/shock/friction/ if the explosive is mechanically sensitive.	P370 +P372+P380+P373 In case of fire: Explosion risk. eEvacuate area. DO NOT fight fire when fire reaches explosives. P372 Explosion risk in case of fire. P373 DO NOT fight fire when fire reaches explosives.	P401 Store in accordance withManufacturer/supplier or the competent authority to specify in accordance with local/regional/national/international regulations (to be specified).as applicable.	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.

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Manufacturer/supplier or the competent		
authority to specify applicable rough		
handling.		
P280		
Wear face protection. Wear protective		
gloves/protective clothing/eye		
protection/face protection.		
Manufacturer/supplier or the competent		
authority to specify the appropriate type of		
equipment.		

EXPLOSIVES (Chapter 2.1)

Hazard statement

Hazard category H204 Division 1.4 Warning Fire or projection hazard

Signal word



Symbol Exploding bomb

Precautionary statements				
Prevention	Response	Storage	Disposal	
P210 Keep away from heat, hot surfaces, sparks, open flames, and other ignition sourceshot surfaces. No smoking. Manufacturer/supplier or the competent authority to specify applicable ignition source(s). P234 Keep only in original packaging. P240 Ground, and bond container and receiving equipment. - if the explosive is electrostatically sensitive. P250 Do not subject to grinding/shock//friction/ - if the explosive is mechanically sensitive. Manufacturer/supplier or the competent authority to specify applicable rough handling. P280 Wear protective gloves/protective clothing/eve protection/face protection. Manufacturer/supplier or competent authority to specify the appropriate type of 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 P372 Explosion risk in case of fire except if explosives are 1.4S AMMUNITION AND COMPONENTS THEREOF. P373 DO NOT fight fire when fire reaches explosives. P374 Fight fire with normal precautions from a reasonable distance If explosives are 1.4S AMMUNITION AND COMPONENTS THEREOF.	P401 Store in accordance withManufacturer/supplier or the competent authority to specify in accordance with-local/regional/ national/international regulations (to be specified).as applicable.	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.	

EXPLOSIVES (Chapter 2.1)

Symbol No symbol

Hazard category Signal word Hazard statement

Division 1.5 Danger H205 May mass explode in fire

Precautionary statements						
Prevention	Response	Storage	Disposal			
P210	P370 <u>+ P372</u> -+ P380 <u>+ P373</u>	P401	P501			
Keep away from heat, hot surfaces, sparks,	In case of fire: Explosion risk. Evacuate	Store in accordance with	Dispose of contents/container to			
open flames and other ignition sources/hot	area. DO NOT fight fire when fire	Manufacturer/supplier or	in accordance with local/regional/			
surfaces. No smoking.	reaches explosives.	the competent authority to	national/international regulations (to			
Manufacturer/supplier or the competent		specify in accordance with	be specified).			
authority to specify applicable ignition	P372	local/regional/	Manufacturer/supplier or the			
source(s).	Explosion risk in case of fire.	national/international	competent authority to specify			
P230	P373	regulations as applicable(to	whether disposal requirements apply			
Keep wetted with	DO NOT fight fire when fire reaches	be specified).	to contents, container or both.			
- for substances and mixtures which are	explosives.					
wetted, diluted, dissolved or suspended with a	K in the					
phlegmatizer in order to reduce or suppress						
their explosive properties (desensitized						
<u>explosives).</u>						
Manufacturer/supplier or the competent						
authority to specify appropriate material.						
if drying out increases explosion						
hazard, except as needed for manufacturing or						
operating processes (e.g. nitrocellulose).						
<u>P234</u>						
Keep only in original packaging.						
P240						
Ground and bond container and receiving						
equipment						
- if the explosive is electrostatically sensitive.						
P250						
Do not subject to						
grinding/shock//friction/						

58	- if the explosive is mechanically sensitive.		
	Manufacturer/supplier or the competent		
	authority to specify applicable rough handling.		
	P280		
	Wear protective gloves/protective		
	clothing/eye protection/face		
	protection. Wear face protection.		
•	Manufacturer/supplier or competent authority		
	to specify the appropriate type of equipment.		

FLAMMABLE GASES (INCLUDING CHEMICALLY UNSTABLE GASES)

(Chapter 2.2)

(Flammable gases)

Symbol Flame

Hazard category Signal word Hazard statement

Danger H220 Extremely flammable gas



Precautionary statements					
Prevention	Disposal				
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources hot surfaces. No smoking. Manufacturer/supplier or competent authority to specify applicable ignition source(s).	P377 Leaking gas fire: Do not extinguish, unless leak can be stopped safely. P381 In case of leakage, Eeliminate all ignition sources if safe to do so.	P403 Store in well-ventilated place.			

FLAMMABLE GASES (INCLUDING CHEMICALLY UNSTABLE GASES) (Chapter 2.2) (Flammable gases)

Symbol
No symbol

Hazard categorySignal wordHazard statement2WarningH221Flammable gas

	Precautionary statements					
Prevention Response Storage Disposal						
P210 Keep away from heat, hot surfaces, /sparks, /open flames/hot surfaces and other ignition sources. No smoking. Manufacturer/supplier or the competent authority to specify applicable ignition source(s).	P377 Leaking gas fire: Do not extinguish, unless leak can be stopped safely. P381 In case of leakage, Eeliminate all ignition sources if safe to do so.	P403 Store in well-ventilated place.				

FLAMMABLE GASES (INCLUDING CHEMICALLY UNSTABLE GASES)

(Chapter 2.2)

(Chemically unstable gases)

Symbol
No additional symbol

Signal word	Additional hazard statement	
No additional signal word	H230	May react explosively even in the absence of air
No additional signal word	H231	May react explosively even in the absence of air at elevated pressure and/or temperature
	No additional signal word	No additional signal word H230

	Precautionary statements				
Prevention Response Storage Disposal					
P202 Do not handle until all safety precautions have been read and understood.					

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

AEROSOLS (Chapter 2.3)

Symbol Flame

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

	H229 Pressurized container: may burst if heated Precautionary statements				
Prevention	Response	Storage	Disposal		
P210		P410 + P412			
Keep away from heat.		Protect from sunlight. Do not expose			
sparks, fopen flames and other ignition		to temperatures exceeding			
sourceshot surfaces. No smoking.		50 °C/122 °F.			
Manufacturer/supplier or the competent		Manufacturer/supplier or the competent			
authority to specify applicable ignition		authority to use applicable temperature			
source(s).		scale.			
P211					
Do not spray on an open flame or other					
ignition source.					
P251					
Do not pierce or burn, even after use.					

AEROSOLS (Chapter 2.3)

Symbol No symbol

Hazard category Signal word Hazard statement

Warning H229 Pressurized container: may burst if heated

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

OXIDIZING GASES (Chapter 2.4)

Symbol Flame over circle

Hazard category Signal word Hazard statement

Danger H270 May cause or intensify fire; oxidizer



Precautionary statements						
Prevention	Response	Storage	Disposal			
P220	P370 + P376	P403				
Keep/Store away from clothing//	In case of fire: Stop leak if safe to do so.	Store in well-ventilated place.				
and other combustible materials.						
Manufacturer/supplier or the						
competent authority to specify other						
incompatible materials.						
P244						
Keep valves and fittings free from oil						
and grease.						

GASES UNDER PRESSURE (Chapter 2.5)

Symbol Gas cylinder

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



	Precautionary statements			
Prevention	Response	Storage	Disposal	
		P410 + P403		
		Protect from sunlight. Store in a		
		well-ventilated place.		
		- P410 may be omitted for gases filled		
		in transportable gas cylinders in		
		accordance with packing instruction		
		P200 of the UN 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)

Symbol Gas cylinder

Hazard category Signal word Hazard statement

Refrigerated liquefied gas Warning H281 Contains refrigerated gas; may cause cryogenic burns or injury



Precautionary statements			
Prevention	Response	Storage	Disposal
P282 Wear cold insulating gloves and either #face shield or /eye protection.	P336 + P315 Thaw frosted parts with lukewarm water. Do not rub affected area. Get immediate medical advice. P315 Get immediate medical advice/attention	P403 Store in well-ventilated place.	

FLAMMABLE LIQUIDS

(Chapter 2.6)

Symbol	
Flame	

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



Precautionary statements				
Prevention	Response	Storage	Disposal	
P210 Keep away from heat, hot surfaces,/sparks, /open flames/and other ignition sourceshot surfaces. No smoking. Manufacturer/supplier or the competent authority to specify applicable ignition source(s). P233 Keep container tightly closed if the liquid is volatile and may generate an explosive atmosphere. P240 Ground and /Bond container and receiving equipment - if electrostatically sensitive material is for reloading if product the liquid is volatile so as to and may generate hazardous and explosive atmosphere. P241 Use explosion-proof [electrical/ventilating/lighting/]/equipment if the liquid is volatile and may generate and explosive atmosphere may be omitted where local or national legislation introduces more specific provisions text in square brackets may be used to specify specific electrical, ventilating, lighting or other equipment if necessary and as appropriate Manufacturer/supplier or the competent authority to specify other equipment.	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 consider 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 wellventilated place. Keep cool. -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/internationa l regulations (to be specified). Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.	

P242		
Use only -non-sparking tools.		
- 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.		
<u>carbon disulfide).</u>		
P243		
Take precautionary measures againstaction to		
<u>prevent</u> static discharges.		
- if the liquid is volatile and may generate an explosive		
<u>atmosphere.</u>		
- may be omitted where local or national legislation		
introduces more specific provisions.		
P280		
Wear protective gloves/eye protection/face		
protection		
Wear protective gloves/protective clothing/eye		
protection/face protection.		
Manufacturer/supplier or the competent authority to		
specify the appropriate type of equipment.		

FLAMMABLE LIQUIDS (Chapter 2.6)

Symbol No symbol

Hazard category Signal word Hazard statement

4 Warning H227 Combustible liquid

T Waining	11227 Collide	ustible fiquid		
Precautionary statements				
Prevention	Response	Storage	Disposal	
P210 Keep away from heat, hot surfaces, sparks, open flames and hot surfacesother ignition sources. No smoking. P280 Wear protective gloves/protective clothing/eye protection/face protection. Wear protective gloves/eye protection/face protection. Manufacturer/supplier or the competent authority to specify the appropriate type of equipment.	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 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)

Symbol Flame

Hazard category Signal word Hazard statement

Danger H228 Flammable solid
Warning H228 Flammable solid



Precautionary statements			
Prevention	Response	Storage	Disposal
P210 Keep away from heat, hot surfaces, /sparks, /open flames/ and other ignition sourceshot surfaces. No smoking. Manufacturer/supplier or the competent authority to specify applicable ignition source(s). P240 Ground and /Bbond container and receiving source.	P370 + P378 In case of fire: Use to extinguish - if water increases risk Manufacturer/supplier or the competent authority to specify appropriate media.		
equipment if the solid is electrostatically sensitive material is for reloading.			
P241 Use explosion-proof [electrical/ventilating/			
lighting/]-equipment.			
Manufacturer/supplier or the competent authority to specify other equipment if dust clouds can occur.			
- may be omitted where local or national legislation introduces more specific provisions.			
- text in square brackets may be used to specify specific electrical, ventilating, lighting or other equipment if necessary and as appropriate.			
P280			
Wear protective gloves/protective			

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

SELF-REACTIVE SUBSTANCES AND MIXTURES (Chapter 2.8)

Symbol Exploding bomb

Hazard category Signal word Hazard statement

Type A Danger H240 Heating may cause an explosion



Precautionary statements			
Prevention	Response	Storage	Disposal
Reep away from heat, hot surfaces, /sparks_/open flames and other ignition sources/hot surfaces. No smoking. Manufacturer/supplier or the competent authority to specify applicable ignition source(s). P220 Keep/Store away from clothing//combustible materials Manufacturer/supplier or the competent authority to specify other incompatible materials. P234 Keep only in original container 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	In case of fire: Use to extinguish Manufacturer/supplier or the competent authority to specify appropriate media. if water increases risk. P370 + P380 + P375 In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion. P370 + P372 + P380 + P373 In case of fire: Explosion risk. Evacuate area. Do NOT fight fire when fire reaches explosives.	P403 + P235 Store in a well-ventilated place. Keep cool. - 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 away from other materials separately.	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.

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protection. Wear protective gloves/eye		
protection/face protection.		
Manufacturer/supplier or the competent		
authority to specify the appropriate type of		
equipment.		

SELF-REACTIVE SUBSTANCES AND MIXTURES (Chapter 2.8)

Symbol Exploding bomb and flame

Hazard category Signal word Hazard statement

Type B Danger H241 Heating may cause a fire or explosion





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protection. Wear protective gloves/eye		
protection/face protection.		
Manufacturer/supplier or the competent		
authority to specify the appropriate type of		
equipment.		

SELF-REACTIVE SUBSTANCES AND MIXTURES (Chapter 2.8)

Symbol Flame

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



Precautionary statements				
Prevention	Response	Storage	Disposal	
P210 Keep away from heat, hot surfaces, /sparks, /open flames/ and other ignition sources hot surfaces. No smoking. Manufacturer/supplier or the competent authority to specify applicable ignition source(s). P220 Keep/Store away from clothing//combustible materialsManufacturer/supplier or the competent authority to specify other incompatible materials. P234 Keep only in original packaging container. P235 Keep coolmay 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	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. - 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 using applicable temperature scale. P420 Store away from other materials separately.	P501 Dispose of contents/container toin 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.	

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protection. Wear protective gloves/eye		
protection/face protection.		
Manufacturer/supplier or the competent		
authority to specify the appropriate type of		
equipment.		

PYROPHORIC LIQUIDS

(Chapter 2.9)

Symbol Flame

Hazard category Signal word Hazard statement

Danger 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/hot surfaces. No smoking. Manufacturer/supplier or the competent authority to specify applicable ignition source(s). P222 Do not allow contact with air. - if emphasis of the hazard statement is deemed necessary. P231+P232 Handle and store contents under inert gas/ Protect from moisture. Manufacturer/supplier or the competent authority to specify appropriate liquid or gas if "inert gas" is not appropriate. P233 Keep container tightly closed. P280 Wear protective gloves/protective clothing/eye protection/face protection. Wear protective gloves/eye protection. Manufacturer/supplier or the competent authority to specify the appropriate type of equipment.	P302 + P334 IF ON SKIN: Immerse in cool water or wrap with wet bandages P370 + P378 In case of fire: Use to extinguish in the water increases risk. In Manufacturer/supplier or the competent authority to specify appropriate media.	Store contents under Manufacturer/supplier or the competent authority to specify appropriate liquid or inert gas.		

PYROPHORIC SOLIDS

(Chapter 2.10)

Symbol Flame

Hazard category

Signal word

Hazard statement

1

Danger H250

Catches fire spontaneously if exposed to air



Precautionary statements				
Prevention	Response	Storage	Disposal	
P210 Keep away from heat, hot surfaces, /sparks, /open flames/hot surfaces and other ignition sources. No smoking. Manufacturer/supplier or the competent authority to specify applicable ignition source(s). P222 Do not allow contact with air. - if emphasis of the hazard statement is deemed necessary. P231 + P232 Handle and store contents under inert gas/ Protect from moisture. Manufacturer/supplier or the competent authority to specify appropriate liquid or gas if "inert gas" is not appropriate. P233 Keep container tightly closed. P280 Wear protective gloves/protective clothing/eye protection/face protection. Wear protective gloves/eye protection/face protection/f	P302 + P335 + P334 IF ON SKIN: Brush off loose particles from skin. Immerse in cool water or wrap in wet bandages. P370 + P378 In case of fire: Use to extinguish - if water increases risk. Manufacturer/supplier or the competent authority to specify appropriate media.	Store contents underManufacturer/supplier or the competent authority to specify appropriate liquid or inert gas.		

SELF-HEATING SUBSTANCES AND MIXTURES (Chapter 2.11)

Symbol Flame

Hazard category Signal word Hazard statement

Danger H251 Self-heating; may catch fire

Warning H252 Self-heating in large quantities; may catch fire



Precautionary statements			
Prevention	Response	Storage	Disposal
Prevention P235 + P410 Keep cool. Protect from sunlight may be omitted if P413 is given on the label P280 Wear protective gloves/protective clothing/eve protection/face protection. Wear protective gloves/eye protection/face protection. Manufacturer/supplier or the competent authority to specify the appropriate type of equipment.	Response	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.	Disposal
		P420 Store <u>separately</u> away from other materials.	

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SUBSTANCES AND MIXTURES WHICH, IN CONTACT WITH WATER, EMIT FLAMMABLE GASES (Chapter 2.12)

Symbol Flame

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



Precautionary statements			
Prevention	Response	Storage	Disposal
P223 Do not allow contact with water. - if emphasis of the hazard statement is deemed necessary. 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. Wear protective gloves/eye protection/face protection. Manufacturer/supplier or the competent authority to specify the appropriate type of equipment.	P302 + P335 + P334 IF ON SKIN: Brush off loose particles from skin, and Immerse in cool water/wrap in wet bandages. P370 + P378 In case of fire: Use to extinguish - if water increases risk. Manufacturer/supplier or the competent authority to specify appropriate media.	P402 + P404 Store in a dry place. Store in a closed container.	Dispose of contents/container toin 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)

Symbol Flame

Hazard category Signal word Hazard statement

Warning 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/eye protection/face protection. Wear protective gloves/protective clothing/eye protection/face protection. Manufacturer/supplier or the competent authority to specify the appropriate type of equipment.	P370 + P378 In case of fire: Use to extinguish. - if water increases risk. 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.

Symbol

Flame over circle

OXIDIZING LIQUIDS (Chapter 2.13)

Hazard category Signal word **Hazard statement**

1 Danger May cause fire or explosion; strong oxidizer H271



Precautionary statements			
Prevention	Response	Storage	Disposal
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P220 Keep/Store away from clothing and other combustible materials. P221 Take any precaution to avoid mixing with combustibles/ Manufacturer/supplier or the competent authority to specify other incompatible materials. P280 Wear protective gloves /eye protection/face protection. Wear protective clothing/eye protection/face protection. Manufacturer/supplier or the competent authority to specify the appropriate type of equipment. P283 Wear fire/flame 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.	Dispose of contents/container toin 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)

Symbol Flame over circle



Hazard category	Signal word	Hazard s	statement
2	Danger	H272	May intensify fire; oxidizer
3	Warning	H272	May intensify fire; 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/Store away from clothing// and other combustible materialsManufacturer/supplier or the competent authority to specify other incompatible materials. P221 Take any precaution to avoid mixing with combustibles/Manufacturer/supplier or the competent authority to specify other incompatible materials. P280 Wear protective gloves/eye protection/face protection. Wear protective gloves/protective clothing/eye protection/face protection. Manufacturer/supplier or the competent authority to specify the appropriate type of equipment.	P370 + P378 In case of fire: Use to extinguish. - if water increases risk. Manufacturer/supplier or the competent authority to specify appropriate media.		Dispose of contents/container toin 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.

Symbol Flame over circle

OXIDIZING SOLIDS (Chapter 2.14)

Hazard category Signal word Hazard statement

Danger 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. P221 Take any precaution to avoid mixing with combustibles/Manufacturer/supplier or the competent authority to specify other incompatible materials. P280 Wear protective gloves/eye protection/face protection. Wear protective gloves/protective clothing/eye protection/face protection. Manufacturer/supplier or the competent authority to specify the appropriate type of equipment. P283 Wear fire/flame 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.	Dispose of contents/container toin 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)

Symbol Flame over circle

Hazard category	Signal word	Hazard statement

2 Danger H272 May intensify fire; oxidizer

Warning H272 May intensify fire; 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/Store away from clothing//and other combustible materials Manufacturer/supplier or the competent authority to specify incompatible materials. P221 Take any precaution to avoid mixing with combustibles/Manufacturer/supplier or the competent authority to specify other incompatible materials.	P370 + P378 In case of fire: Use to extinguish. - if water increases risk. 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.
P280 Wear protective gloves/eye protection/face protection. Wear protective gloves/protective clothing/eye protection/face protection. Manufacturer/supplier or the competent authority to specify the appropriate type of equipment.			

UN/SCETDG/42/INF.8 – UN/SCEGHS/24/INF.5 Annex 3

ORGANIC PEROXIDES (Chapter 2.15)

Symbol Exploding bomb

Hazard category Signal word Hazard statement

Type A Danger 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/hot surfaces. No smoking. Manufacturer/supplier or the competent authority to specify applicable ignition source(s). P220 Keep/Store away from clothing//combustible materials Manufacturer/supplier or the competent authority to specify incompatible materials. P234 Keep only in original packaging container. 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/eve protection/face protection. Manufacturer/supplier or the competent authority to specify the appropriate type of equipment.	P370 + P372 + P380 + P373 In case of fire: Explosion risk. Evacuate area. Do NOT fight fire when fire reaches explosives	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 + P235 Store at temperatures not exceeding°C/°F. Keep cool. - 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. P410 Protect from sunlight. P420 Store separatelyaway from other materials.	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 Signal word Hazard statement

Type B Danger H241 Heating may cause a fire or explosion

Symbol Exploding bomb and flame





Precautionary statements			
Prevention	Response	Storage	Disposal
P210 Keep away from heat, hot surfaces, /sparks, /open flames and other ignition sources/hot surfaces. No smoking. Manufacturer/supplier or the competent authority to specify applicable ignition source(s). P220 Keep /Store away from elothing//combustible materials Manufacturer/supplier or the competent authority to specify incompatible materials. P234 Keep only in original packaging container. 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	P370 + P378 In case of fire: Use to extinguish Manufacturer/supplier or the competent authority to specify appropriate media. — if water increases risk. P370+P380+P375 In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion. P370 + P380 + P375 [+ P378] In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion. [Use to extinguish.] — text in square brackets to be used if water increases riskManufacturer/supplier or the competent authority to specify appropriate media.	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 + P235 Store at temperatures not exceeding°C/°F. Keep cool. - 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. P410 Protect from sunlight. P420 Store separately away from other materials.	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.

	UN/SCETDG/42/INF.8
Annex 3	8 - UN/SCEGHS/24/INF.5

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

ORGANIC PEROXIDES (Chapter 2.15)

Symbol Flame

Hazard category	Signal word	Hazard statement	
Type C	Danger	H242	Heating may cause a fire
Type D	Danger	H242	Heating may cause a fire
Type E	Warning	H242	Heating may cause a fire
Type F	Warning	H242	Heating may cause a fire
		D	-4



Precautionary statements				
Prevention Response	Storage	Disposal		
Reep away from heat, /hot surfaces, sparks, /open flames and other ignition sources/hot surfaces. No smoking. Manufacturer/supplier or the competent authority to specify applicable ignition source(s). P220 Keep/Store away from clothing// combustible materials Manufacturer/supplier or the competent authority to specify incompatible materials. P234 Keep only in original packaging container. 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.	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 + P235 Store at temperatures not exceeding°C/°F. Keep cool 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. P410 Protect from sunlight. P420 Store separatelyaway from other	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.		

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

CORROSIVE TO METALS (Chapter 2.16)

Symbol Corrosion

Hazard category Signal word Hazard statement

Warning H290 May be corrosive to metals



Precautionary statements			
Prevention	Response	Storage	Disposal
P234 Keep only in original <u>packaging</u>container.	P390 Absorb spillage to prevent material damage.	P406 Store in a corrosion corrosive resistant/ container with a resistant inner liner may be omitted if P234 is given on the label Manufacturer/supplier or the competent authority to specify other compatible materials.	

UN/SCETDG/42/INF.8 – UN/SCEGHS/24/INF.5 Annex 3

ACUTE TOXICITY - ORAL (Chapter 3.1)

Symbol Skull and crossbones

Hazard category	Signal word	Hazard	statement
1	Danger	H300	Fatal if swallowed

Danger H300 Fatal 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.	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)

Symbol Skull and crossbones

Hazard category Signal word Hazard statement

3 Danger H301 Toxic 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 + 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.	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.	

Symbol Exclamation mark

ACUTE TOXICITY - ORAL (Chapter 3.1)

Hazard category Signal word Hazard statement

4 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 unwellManufacturer/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)

Symbol		
No symbol		

Hazard categorySignal wordHazard statement5WarningH303May be harmful if swallowed

Precautionary statements			
Prevention	Response	Storage	Disposal
	P312 Call a POISON CENTER/doctor//if you feel unwellManufacturer/supplier or the competent authority to specify the appropriate source of emergency medical advice.		

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ACUTE TOXICITY - DERMAL (Chapter 3.1)

Symbol Skull and crossbones

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

Danger H310 Fatal in contact with skin



Precautionary statements			
Prevention Response	Storage	Disposal	
Do not got in every on skin, on an elething IE ON SKIN. Week with planty of	tore locked up.	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 - DERMAL (Chapter 3.1)

Symbol Skull and crossbones

Hazard category Signal word Hazard statement

Danger H311 Toxic in contact with skin



Precautionary statements				
Prevention Response Storage Disposal				
P280 Wear protective gloves/protective clothing. Manufacturer/supplier or the competent authority to specify the appropriate type of equipment.	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 unwellManufacturer/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.	

UN/SCETDG/42/INF.8 – UN/SCEGHS/24/INF.5 Annex 3

ACUTE TOXICITY - DERMAL (Chapter 3.1)

Symbol Exclamation mark

Hazard category Signal word Hazard statement

4 Warning H312 Harmful in contact with skin



Precautionary statements						
Prevention	Prevention Response Storage Disposal					
Wear protective gloves/protective clothing Manufacturer/supplier or the competent authority to specify the appropriate type of equipment.	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.			

ACUTE TOXICITY - DERMAL (Chapter 3.1)

Symbol	
No symbol	

Hazard category Signal word Hazard statement

5 Warning H313 May be harmful in contact with skin

Precautionary statements			
Prevention	Response	Storage	Disposal
	P312 Call a POISON CENTER/doctor//if you feel unwellManufacturer/supplier or the competent authority to specify the appropriate source of emergency medical advice.		

UN/SCETDG/42/INF.8 – UN/SCEGHS/24/INF.5 Annex 3

ACUTE TOXICITY - INHALATION (Chapter 3.1)

Symbol Skull and crossbones

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

2 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) - if immediate administration of antidote is required. Reference to supplemental first aid instruction.	P403 + P233 Store in a well-ventilated place. Keep container tightly closed. - if product the chemical is volatile as to and may generate a hazardous atmosphere. P405 Store locked up.	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 - INHALATION (Chapter 3.1)

Symbol Skull and crossbones

Hazard category Signal word Hazard statement

3 Danger H331 Toxic 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. P271 Use only outdoors or in a well-ventilated area.	P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P311 Call a POISON CENTER/doctorManufacturer/supplier or the competent authority to specify the appropriate source of emergency medical advice. P321 Specific treatment (see on this label) - if immediate specific measures are required 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.— if product is volatile so as to generate hazardous atmosphere. P405 Store locked up.	Dispose of content/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.

UN/SCETDG/42/INF.8 – UN/SCEGHS/24/INF.5 Annex 3

ACUTE TOXICITY - INHALATION (Chapter 3.1)

Symbol Exclamation mark

Hazard category Signal word Hazard statement

4 Warning H332 Harmful 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. 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.		

ACUTE TOXICITY - INHALATION (Chapter 3.1)

Symbol	
No symbol	

Hazard category Signal word Hazard statement

5 Warning H333 May be harmful if inhaled

Precautionary statements			
Prevention	Response	Storage	Disposal
	P304 + P312 IF INHALED: Call a POISON CENTER/doctor//if you feel unwellManufacturer/supplier or the competent authority to specify the appropriate source of emergency medical advice.		

Symbol Corrosion

SKIN CORROSION/IRRITATION

(Chapter 3.2)

Hazard category Signal word Hazard statement

1A to 1C Danger H314 Causes severe skin burns and eye damage



Precautionary statements			
Prevention	Response	Storage	Disposal
P260 Do not breathe dusts or mists if inhalable particles of dusts or mists may occur during use. P264 Washthoroughly after handlingManufacturer/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 to specify the appropriate type of equipment.	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 for shower]. - text in square brackets to be included where the manufacturer/supplier or the competent authority consider 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) -MManufacturer/supplier or the competent authority may specify a cleansing agent if appropriate. Reference to supplemental first aid instruction. 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 (Chapter 3.2)

Symbol Exclamation mark

Hazard category Signal word Hazard statement

2 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 to specify the appropriate type of equipment.	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) —Manufacturer/supplier or the competent authority may specify a cleansing agent if appropriate Reference to supplemental first aid instruction. P332 + P313 If skin irritation occurs: Get medical advice/attention. — may be omitted when P333+P313 appears is given on the label P362 + P364 Take off contaminated clothing and wash it before reuse.		

SKIN CORROSION/IRRITATION

(Chapter 3.2)

Symbol		
No symbol		

Hazard category Signal word Hazard statement

Warning H316 Causes mild skin irritation

Precautionary statements			
Prevention	Response	Storage	Disposal
	P332 + P313 If skin irritation occurs: Get medical advice/attention. – may be omitted when P333+P313 appears-is given on the label		

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EYE DAMAGE/IRRITATION (Chapter 3.3)

Symbol Corrosion

Hazard category Signal word Hazard statement

Danger H318 Causes serious eye damage



Precautionary statements			
Prevention	Response	Storage	Disposal
P280 Wear eye protection/face protection. Manufacturer/supplier or the competent authority to specify the appropriate type of equipment.	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 (Chapter 3.3)

Symbol Exclamation mark

Hazard category Signal word Hazard statement

2A Warning H319 Causes serious eye 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 eye protection/face protection. Manufacturer/supplier or the competent authority to specify the appropriate type of equipment.	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.					

EYE DAMAGE/IRRITATION (Chapter 3.3)

Symbol
No symbol

Hazard category Signal word Hazard statement

2B Warning H320 Causes eye 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.	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.				

SENSITIZATION - RESPIRATORY (Chapter 3.4)

Symbol Health hazard

Hazard category Signal word Hazard statement

1, 1A, 1B Danger H334 May cause allergy or asthma symptoms or breathing difficulties if

inhaled



Precautionary statements					
Prevention	Response	Storage	Disposal		
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 (Chapter 3.4)

Symbol Exclamation mark

Hazard category

Signal word

Hazard statement

1, 1A, 1B

Warning

H317 May cause an allergic skin reaction



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. P272 Contaminated work clothing should not be allowed out of the workplace. P280 Wear protective gloves. Manufacturer/supplier or the competent authority to specify the appropriate type of equipment.	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. P321 Specific treatment (see on this label) —Manufacturer/supplier or the competent authority may specify a cleansing agent if appropriate Reference to supplemental first aid instruction. P362 + P364 Take off contaminated clothing and wash it before reuse.		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	Signal word	1. Hazard statement	
1	Danger	H340	May cause genetic defects <>
2	Warning	H341	Suspected of causing genetic defects <>
		<>	(state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)



	Precautionary statements						
Prevention	Response	Storage	Disposal				
P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. P280 Wear protective gloves/protective clothing/eye protection/face protection. Manufacturer/supplier or the competent authority to specify the appropriate type of equipment.	P308 + P313 IF exposed or concerned: Get medical advice/attention.	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)

Symbol Health hazard

Hazard category	ory Signal word		d statement
1	Danger	H350	May cause cancer <>
2	Warning	H351	Suspected of causing cancer <>



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

	Precautionary statements						
Prevention	Response	Storage	Disposal				
P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. P280 Wear protective gloves/protective clothing/eye protection/face protection. Manufacturer/supplier or the competent authority to specify the appropriate type of equipment.	P308 + P313 IF exposed or concerned: Get medical advice/attention.	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.				

${\bf TOXIC\ TO\ REPRODUCTION}$

(Chapter 3.7)

Hazard category	Signal word	Hazard	Hazard statement		
1	Danger	H360	May damage fertility or the unborn child <> <<>>		
2	Warning	H361 Suspected of damaging fertility or the unborn child <			
		<>	(state specific effect if known)		
		<<>>	(state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)		



Precautionary statements						
Prevention	Response	Storage	Disposal			
P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. P280 Wear protective gloves/protective clothing/eye protection/face protection. Manufacturer/supplier or the competent authority to specify the appropriate type of equipment.	P308 + P313 IF exposed or concerned: Get medical advice/attention.	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.			

TOXIC TO REPRODUCTION (Chapter 3.7) (EFFECTS ON OR VIA LACTATION)

Symbol
No symbol

Hazard category Signal word Hazard statement

(additional) No signal word H362 May cause harm to breast-fed children

Precautionary statements					
Prevention	Response	Storage	Disposal		
P201 Obtain special instructions before use. P260 Do not breathe dusts or mists if inhalable particles of dusts or mists may occur during use.	P308 + P313 IF exposed or concerned: Get medical advice/attention.				
P263 Avoid contact during pregnancy and while nursing.					
P264 Wash thoroughly after handlingManufacturer/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.					

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

Symbol Health hazard

Hazard category
Signal word
Hazard statement

Hazard statement

Hazard statement

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.	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)

Symbol Health hazard

Hazard category Signal word Hazard statement

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

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

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



Precautionary statements				
Prevention	Response	Storage	Disposal	
P260 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.	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.	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)

Symbol Exclamation mark

Hazard category Signal word Hazard statement

Warning H335 May cause respiratory irritation; or

H336 May cause drowsiness or

dizziness



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. 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 if the chemical is volatile and may generate a hazardous atmosphere. if product is volatile so as to generate hazardous atmosphere. P405 Store locked up.	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	Signal word	Hazard	statement
1	Danger	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 handlingManufacturer/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.		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)

Symbol		
Health hazard		

Hazard category	Signal word	Hazard statement	
2	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.		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	Signal word	Hazard statem	nent
1	Danger	H304	May be fatal if swallowed and enters airways
2	Warning	H305	May be harmful if swallowed and enters airways



Precautionary statements				
Prevention	Response	Storage	Disposal	
	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. P331 Do NOT induce vomiting.	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 - ACUTE HAZARD (Chapter 4.1)

Symbol Environment

Hazard category Signal word Hazard statement

1 Warning H400 Very toxic to aquatic life



Precautionary statements			
Prevention	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 - ACUTE HAZARD (Chapter 4.1)

S	ymbol	
No	symbol	

Hazard category	Signal word	Hazard statement	
2	No signal word	H401	Toxic to aquatic life
3	No signal word	H402	Harmful to aquatic life

Precautionary statements			
Prevention	Response	Storage	Disposal
P273			P501
Avoid release to the environment. - if this is not the intended use.			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 HAZARD (Chapter 4.1)

Symbol Environment

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



Precautionary statements				
Prevention	Response	Storage	Disposal	
P273	P391 Collect spillage.		P501	
Avoid release to the environment if this is not the intended use.	Concert sprange.		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 HAZARD (Chapter 4.1)

Symbol No symbol

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

Precautionary statements			
Prevention	Response	Storage	Disposal
P273			P501
Avoid release to the environment.			Dispose of contents/container to
- if this is not the intended use.			in accordance with
			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)

Symbol Exclamation mark

Hazard category Signal word Hazard statement

Warning H420 Harms public health and the environment by destroying ozone in the upper atmosphere



Precautionary statements				
Prevention	Response	Storage	Disposal	
			P502 Refer to manufacturer/or supplier for information on recovery or recycling	

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