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

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

7 June 2010

Nineteenth session

Geneva, 30 June–2 July 2010 Item 2 (d) of the provisional agenda Updating of the third revised edition of the Globally Harmonized System of Classification and Labelling of Chemicals (GHS): Annexes

Revision of Annexes 1, 2 and 3 of the GHS – Precautionary statements

Transmitted by the expert from the United Kingdom on behalf of the informal correspondence group

A. Introduction

1. At its sixteenth session (December 2008), the Sub-Committee approved the continuing work plan for the informal correspondence group on the improvement of Annexes 1, 2, and 3 of the GHS (see document ST/SG/AC.10/C.4/2008/CRP.3/Add.5). This stated that the group would:

"Pursue work to further improve Annexes 1, 2 and 3 of the GHS. The correspondence group will work on the following work streams, with the first given priority:

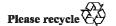
Workstream 1: to develop proposals to rationalize and improve the usability of hazard and precautionary statements, including proposals to eliminate redundancies among these statements

Workstream 2: to improve the presentation of Annexes 1 to 3 of the GHS, taking into account the intended audiences, uses and purposes of the GHS."

2. In accordance with Workstream 1 of this work programme, this paper presents a set of preliminary proposals for rationalising the precautionary statements given in Annex 3 of the GHS.

B. Background – GHS precautionary statements

- 3. Presently there are a number of factors limiting the usability of the GHS precautionary statements:
- (a) A high number of precautionary statements may be triggered for a substance or mixture, even with a relatively simple classification. Including all the statements triggered for a given chemical would arguably confuse the user and reduce the effectiveness of hazard and safety communication;
- (b) Selection of appropriate precautionary statements by manufacturers and suppliers can be difficult when a large number are triggered;



- (c) Different hazard classifications trigger similar but different precautionary statements, leading to arguably unnecessary small differences between precautionary measures recommended in different circumstances.
- 4. To illustrate these problems, three examples of substances are given in Annex II to this paper, together with the list of precautionary statements that are triggered. (The classifications are based on those given in the European Union harmonised classification list given in Part 3.1 of Annex VI of EC Regulation 1272/2008). It can be seen that a large number of PS are triggered in each case, to the extent that hazard communication is likely to be obscured if all are included on a chemical label.
- 5. For these reasons, the informal correspondence group has been considering a number of approaches to rationalising and improving the usability of the GHS precautionary statements. These approaches have been outlined in more detail in previous INF papers (UN/SCEGHS/15/INF.26, UN/SCEGHS/16/INF.24, UN/SCEGHS/18/INF.18). However, they include:
- (a) Editorial amendments to rationalise/reduce/shorten the existing precautionary statements;
- (b) Development of new combinations of precautionary statements;
- (c) Re-grouping of precautionary statements;
- (d) Provision of further guidance for selection of precautionary statements, in particular using the "conditions for use" column in the tables in Annex 3 part 3 of the GHS
- (e) Forming an "order of preference" for precautionary statements, allowing some to be prioritised over others;
- (f) Use of "signpost statements" which direct the user of a chemical to alternative places where safety information can be given, such as a safety data sheet or instructions for use.

C. Progress on rationalisation of precautionary statements since the eighteenth session of the Sub-Committee

- 6. Since the eighteenth session the informal correspondence group has held three telephone conferences, and has provisionally agreed a set of amendments to help rationalise and in some cases clarify the existing precautionary statements. The proposed amendments mostly fall within approach (a) above (editorial amendments/rationalisations), though in some cases they also draw on the other approaches.
- 7. The proposals are outlined and explained in Annex I to this paper. In Annex III, the changes required by the proposals to the tables of precautionary statements given in Annex 3 of the GHS are shown. By way of illustration, Annex II also contains three examples of substances which trigger a relatively large number of precautionary statements, and shows the effect of the proposals for rationalisation on these statements.
- 8. It can be seen that although the proposals made in the paper do help to reduce the number/length of statements, their overall impact in these examples is relatively small (and is likely to be small in other cases too). Therefore it is likely that more work on approaches (b) (f) (outlined in para. 5) will be required in order to find a full solution to the issues identified above with the precautionary statements. Work on these further approaches will therefore be continued by the group as soon as an agreed proposal is reached on the proposals presented here.

D. Progress on other work within the group

P410

- 9. At the eighteenth session of the GHS Sub-Committee, the Responsible Packaging Management Association of southern Africa (RPMASA) presented the informal document UN/SCEGHS/18/INF.9, proposing to amend the GHS so that the precautionary statement P410 "Protect from sunlight" is no longer triggered for the hazard class, Gases under Pressure. Agreement was not reached on the proposal at this session, but it was agreed that the issue would be further discussed within the Annexes 1-3 correspondence group.
- 10. This issue has since been discussed at two teleconferences within the group, and RPMASA will present a revised version of their proposal in a separate INF paper.

Physical hazard precautionary statements

- 11. The informal correspondence group has also agreed to consider a set of proposals from CEFIC members to make some revisions to clarify and rationalise the conditions of application for the precautionary statements for physical hazards. A number of further proposals have also been received from EU physical hazard experts for amendment to the physical hazard statements.
- 12. A consolidated document is currently being produced which combines the various amendments which have been proposed, for circulation to the informal correspondence group and to the Sub-Committee. However, the proposals in their totality have not yet been considered by the correspondence group. The Sub-Committee will be updated as soon as there is further progress within this workstream.

Workstream 2 – improving the presentation of Annexes 1-3

13. It was agreed at the December 2008 meeting of the Sub-Committee that the correspondence group should also take forward work on Workstream 2 of the group's work plan, to improve the presentation of Annexes 1 to 3 of the GHS, though Workstream 1 (rationalisation of precautionary statements) should be given priority. This has not yet been discussed within the group, however it will be taken forward as soon as satisfactory progress has been made within Workstream 1.

E. Action requested of the Subcommittee and next steps

14. The Sub-Committee's preliminary views are sought on the proposals to amend the GHS precautionary statements outlined in Annexes I and III of this INF document. Subject to the feedback received from the Sub-Committee, the correspondence group will then aim to present the changes in a working document for formal agreement at the December 2010 Sub-Committee meeting.

F. Summary of annexes

Annex I (page 5):

Summary of proposed changes to the precautionary statements with associated explanations

Annex II (page 15)

Examples of substances and their associated precautionary statements, together with the amendments resulting from the proposals in this document.

Annex III (page 27)

Marked up version of all changes to Annex 3 of GHS as a result of proposed amendments to the precautionary statements.

Annex I

List of proposed amendments to precautionary statements with explanations

1. P223 Keep away from any possible contact with water, because of violent reaction and possible flash fire.

Current situation:

The precautionary statement above applies to substances and mixtures which, in contact with water, emit flammable gases (chapter 2.12) – categories 1 and 2.

Proposed change:

Delete text "because of violent reaction and possible flash fire" so that precautionary statement reads simply, "Keep away from any possible contact with water".

Justification:

Explanation of a required action is not normally given in precautionary statements. Text after comma is redundant because the hazard statement for this class gives the required information. For category 1 the hazard statement is: "In contact with water releases flammable gases, which may ignite spontaneously", and for category 2 the hazard statement is "In contact with water releases flammable gas".

2. P244 Keep reduction valves free from grease and oil

Current situation:

The above PS applies to oxidizing gases (chapter 2.4) category 1.

Proposed change:

Rephrase as "Keep valves and fittings free from oil and grease".

Justification:

This precaution should not be restricted to the equipment connected to the pressure receptacles, but should be more general. The proposed text is also currently widely in use on a voluntary basis.

3. P260 Do not breathe dust/fume/gas/mist/vapours spray P261 Avoid breathing dust/fume/gas/mist/vapours/spray

Current situation

P260 applies to acute toxicity, categories 1 and 2, STOT single and repeat exposure categories 1 and 2, skin corrosion categories 1A, 1B, 1C and reproductive toxicity, effects on or via lactation.

P261 applies to acute toxicity, categories 3 and 4, respiratory sensitization categories 1, 1A and 1B, skin sensitization categories 1, 1A and 1B and STOT single exposure category 3 (narcotic effects/respiratory tract irritation).

Proposed change

Include a note in the conditions for use for P261 stating that P261 need not be present when P260 is already on the label.

Justification

Clearly, P260 is a stronger precaution than P261 and renders P261 redundant.

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

P281 Use personal protective equipment as required

Current situation

P280 applies to various hazard categories within 15 different health and physical hazard classes.

P281 applies to carcinogenic, mutagenic and toxic to reproduction (CMRs) substances and mixtures and unstable explosives.

Proposal

Delete P281 and extend P280 to cover CMRs and unstable explosives, adding a note for "manufacturer/supplier or the competent authority to specify the type of equipment".

Justification

P281 has the same intent as P280, but P280 gives the option for more precision as to the specific personal protective equipment (PPE) required. Therefore, there seems no need to have two different statements covering the general need to use PPE – it is preferable to have the single statement P280 cover all cases.

5. P284 Wear respiratory protection P285 In case of inadequate ventilation wear respiratory protection

Current situation

P284 applies to acute toxicity, inhalation, categories 1 and 2.

P285 applies to respiratory sensitisers categories 1, 1A and 1B.

Proposed change

Consolidate into a single statement, which would apply to both acute toxicity categories and respiratory sensitisers. This would read:

P284 [In case of inadequate ventilation] wear respiratory protection.

With the condition for use:

"- text in square brackets may be used where additional safety information regarding adequate ventilation is provided."

Justification

The possibility of using chemicals without respiratory protection in conditions of good ventilation exists for both respiratory sensitisers and acutely toxic chemicals. However, in the absence of further information users may find it difficult to judge what is "adequate ventilation". Therefore if the phrase "in case of inadequate ventilation" is used, additional information should be required with the chemical to explain what ventilation conditions would be adequate.

6. P307 IF exposed:

P308 IF exposed or concerned:

P309 IF exposed or if you feel unwell:

Current situation

These occur only in combination with statements advising the user to seeking medical advice.

P307 + P311

IF exposed: Call a POISON CENTER or doctor/physician

assigned to specific target organ toxicity, single exposure, category 1.

P308 + P313

IF exposed or concerned: Get medical advice/attention

assigned to all CMR categories.

P309 + P311

IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician

assigned to specific target organ toxicity, single exposure, category 2.

Proposal

Delete P307 and P309 and replace them with P308, so that P308 is used in all three combined precautionary statements above. They would now read:

P307-P308 + P311

IF exposed or concerned: Call a POISON CENTER or doctor/physician

P308 + P313

IF exposed or concerned: Get medical advice/attention

P309-P308 + P311

IF exposed or <u>concerned</u> if you feel unwell: Call a POISON CENTER or doctor/physician

Justification

P307, P308 and P309 are intended to advise seeking medical attention in a number of scenarios: exposure without symptoms or with delayed symptoms, symptoms without known exposure, or exposure with immediate symptoms. However, all these eventualities are covered by P308 so rationalisation can be achieved without loss of protection by using P308 throughout. This also has the advantage of simplifying this set of precautionary statements by using a single formulation instead of several slightly different ones.

7. P310 Immediately call a POISON CENTER or doctor/physician P311 Call a POISON CENTER or doctor/physician P312 Call a POISON CENTER or doctor/physician if you feel unwell

Current situation

The statements above are used for numerous health hazard classes and categories in conjunction with a prefix, e.g. "IF INHALED:", "IF SWALLOWED:", "if exposed or concerned:" etc. They are generally used to advise seeking advice where there will be acute effects (acute toxicity, skin corrosion, severe eye damage, STOT single exposure and other classes).

Proposal

Edit the statements to read "call a POISON CENTER/doctor/". In full they would read:

P310 Immediately call a POISON CENTER or /doctor/physician/...

P311 Call a POISON CENTER or doctor/physician/....

P312 Call a POISON CENTER or doctor/physician/.... if you feel unwell

Add a note in conditions for use:

"Manufacturer/supplier or the competent authority to specify the appropriate source of emergency medical advice."

Justification

The word "physician" is not in current usage in either US or British English so there seems no need to offer this as an option. Countries have differing arrangements for delivery of first-line medical advice: in some countries members of the public should call Poison Centres, whereas in others (e.g. UK) this is not the case and Poison Centres only deal with medical professionals. The proposed amendment retains the reference to Poison Centres but gives some flexibility for the appropriate advice to be given in each country.

8. P321 Specific treatment (see ... on this label) P322 Specific measures (see ... on this label)

Current situation

P321 is given for various categories within acute toxicity (oral and inhalation), skin corrosion, skin irritation and skin sensitization, and specific target organ toxicity. The type of treatment is specified in conditions for use and may be a specific antidote (for acute toxicity oral 1, 2), a cleaning agent (for skin corrosion/irritation/sensitization categories) or other unspecified measures.

P322 is only assigned to acute toxicity, dermal categories 1, 2, 3 and 4, and is given the condition for use:

- "... Reference to supplemental first aid instruction.
- if immediate measures such as specific cleansing agent is advised."

Proposal

Delete P322 and use P321 instead for the categories to which it applies. Therefore, acute toxicity, dermal, categories 1, 2, 3 and 4 would all receive the statement:

P321 Specific treatment (see ... on this label)

With the condition for use:

- "... Reference to supplemental first aid instruction.
- if immediate measures such as specific cleansing agent is advised."

Justification

Rationalisation. The GHS currently draws no clear distinction between 'treatment' and 'measures' – i.e. between cases where P321 and P322 applies. E.g. while the conditions for use for P322 refer to 'measures' and use of cleansing agents, the conditions for use for P321 (specific treatment) also refer to both measures (e.g. for acute toxicity, inhalation category 3), and to cleansing agents (e.g. for skin corrosion 1A, 1B and 1C). Therefore it would be simpler just to use the one formulation (specific treatment) to refer to all cases.

9. P332 If skin irritation occurs:

P333 If skin irritation or rash occurs:

Current situation

The statements only occur in combination with references to seeking medical attention.

P332 + P313

If skin irritation occurs: Get medical advice/attention

applies to skin irritation categories 2 and 3.

P333 + P313

If skin irritation or rash occurs: Get medical advice/attention

applies to skin sensitizers, 1, 1A and 1B.

Proposal

Add a condition for use to P332 + P313: "- may be omitted if P333 + P313 appears on the label"

Justification

Evident redundancy where both statements appear, P313 + P333 is the stronger of the two so should take precedence.

10. P340 Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P341 If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

P342 If experiencing respiratory symptoms:

Current situation

Respiratory sensitisers are assigned P304 + P341:

IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

Chemicals classified as acutely toxic by inhalation, categories 1, 2, 3 and 4 are assigned P304 + P340:

IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

Proposal

For respiratory sensitisers use P304 + P340 instead of P304 + P341.

Also, edit P340 to read: "Remove person to fresh air and ensure comfortable breathing".

Respiratory sensitisers would now be assigned:

P304 + P341 P340

IF INHALED: If breathing is difficult, remove victim person to fresh air and keep at rest in a position ensure comfortable for breathing.

Chemicals classified as acutely toxic by inhalation, categories 1, 2, 3 and 4 would be assigned:

P304 + P340

IF INHALED: remove victim-person to fresh air and keep at rest in a position ensure comfortable for breathing.

Justification

The double conditional in P304 + P341 "IF INHALED: If breathing is difficult..." is confusing and seems unnecessary. It seems simpler to require "IF INHALED: remove person to fresh air...".

The phrasing "remove victim [person] to fresh air and keep at rest in a position comfortable for breathing" is rather long and complex. The same essential precaution could be conveyed using the shorter wording "remove victim [person] to fresh air and ensure comfortable breathing".

"Victim" seems rather an emotive term, so the more neutral "person" is preferable.

11. P350 Gently wash with plenty of soap and water P352 Wash with plenty of soap and water

Current situation

P350 and P352 both occur only in combination with P302 "IF ON SKIN:".

Chemicals classified as acutely toxic, dermal, categories 1 and 2 are assigned:

P302 + P350

IF ON SKIN: Gently wash with plenty of soap and water

Chemicals classified as acutely toxic, dermal category 3 and 4, skin irritant, category 2 and skin sensitisation 1, 1A and 1B, are assigned:

P302 + P352

IF ON SKIN: wash with plenty of soap and water

Proposal

Delete P350 and use P302 + P352 instead for chemicals classified as acutely toxic 1 and 2.

Amend P352 to read "wash with plenty of water/...", and add the condition for use, "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".

Chemicals classified as acutely toxic 1, 2, 3 and 4, skin irritant 2, and skin sensitizer 1, 1A and 1B, would therefore receive:

P302 + P352

IF ON SKIN: wash with plenty of soap and water/....

Justification

"Gently" seems inappropriate for more severe categories of dermal acute toxicity, quick action is paramount and this phrasing may discourage it.

The most important precaution for all the above hazard categories is to wash the skin in plenty of water as soon as possible, advising use of soap could cause unnecessary delay.

There should be flexibility to require a cleansing agent other than water, but only in exceptional cases where water is clearly not appropriate.

12. P361 Remove/take off immediately all contaminated clothing P362 Take off contaminated clothing and wash before reuse P363 Wash contaminated clothing before reuse

Current situation

These statements are assigned in different combinations to a number of different hazard categories. The current assignment is summarised in the tables below. (The tables include changes proposed in this document to precautionary statements other than P361-P363.)

Precautionary statements		Hazard class/category	
P361	Remove/take off immediately all contaminated	Flammable liquids	1, 2, 3
	clothing	Acute toxicity, dermal	1, 2, 3
		Skin corrosion	1A, 1B, 1C
P362	Take off contaminated clothing and wash	Skin irritation	2
	before reuse		
P363	Wash contaminated clothing before reuse	Acute toxicity, dermal	1, 2, 3
		Acute toxicity, dermal	4
		Skin corrosion	1A, 1B, 1C
		Skin sensitization	1, 1A, 1B

Hazard class/category	Precautionary statements
Flammable liquids 1, 2, 3	P303 + P361 + P353
	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
Acute toxicity, dermal 1, 2, 3	P302 + P352 IF ON SKIN: Wash with plenty of soap and water/ P361 Remove/Take off immediately all contaminated clothing P363
	Wash contaminated clothing before reuse
Acute toxicity, dermal 4	P302 + P352 IF ON SKIN: Wash with plenty of soap and water/ P363 Wash contaminated clothing before reuse
Skin corrosion 1A, 1B, 1C	P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower P363 Wash contaminated clothing before reuse
Skin irritation 2	P302 + P352 IF ON SKIN: Wash with plenty of soap and water/ P362 Take off contaminated clothing and wash before re-use
Skin sensitization 1, 1A, 1B	P302 + P352 IF ON SKIN: Wash with plenty of soap and water/ P363 Wash contaminated clothing before reuse

Proposal

Include a statement advising removal of contaminated clothing for acute toxicity, dermal 4 and skin sensitization 1, 1A, 1B (currently they only require "wash contaminated clothing before reuse").

Delete "and wash before reuse" from P362. Introduce a further (partial) precautionary statement, "and wash it before reuse", to enable combinations to be formed with P361 and P362, e.g. P361 + P364 "Remove/Take off immediately all contaminated clothing and wash it before reuse"

Delete "Remove" from "Remove/Take off..."

The revised assignment of precautionary statements to the hazard categories above would be:

Precautionary statements		Hazard class/category	
P361	Remove/tTake off immediately all contaminated	Flammable liquids	1, 2, 3
	clothing	Acute toxicity, dermal	1, 2, 3
		Skin corrosion	1A, 1B, 1C
P362	Take off contaminated clothing and wash	Skin irritation	2
	before reuse.	Acute toxicity, dermal	4
		Skin sensitization	1A, 1B, 2
P363	Wash contaminated clothing before reuse	Acute toxicity, dermal	1, 2, 3
		Skin corrosion	1A, 1B, 1C
		Acute toxicity, dermal	4
		Skin sensitization	1A, 1B, 2
P364	and wash it before reuse	Acute toxicity, dermal	1, 2, 3, 4
	_	Skin irritation	2
		Skin sensitization	1A, 1B

Hazard class/category	Precautionary statements
Flammable liquids 1, 2, 3	P303 + P361 + P353
	IF ON SKIN (or hair): Remove/Take off immediately all
	contaminated clothing. Rinse skin with water/shower
Acute toxicity, dermal 1, 2, 3	P302 + P352
	IF ON SKIN: Wash with plenty of soap and water/
	P361 <u>+ P364</u>
	Remove/Take off immediately all contaminated clothing and wash it
	before reuse
	P363
	Wash contaminated clothing before reuse.
Acute toxicity, dermal 4	P302 + P352
	IF ON SKIN: Wash with plenty of soap and water/
	P363 P362 + P364
	Take off contaminated clothing and wash it before reuse
Skin corrosion 1A, 1B, 1C	P303 + P361 + P353
	IF ON SKIN (or hair): Remove/tTake off immediately all
	contaminated clothing. Rinse skin with water/shower
	P363
	Wash contaminated clothing before reuse
Skin irritation 2	P302 + P352
	IF ON SKIN: Wash with plenty of soap and water/
	P362 <u>+ P364</u>
	Take off contaminated clothing and wash before reuse and wash it
	<u>before reuse</u>
Skin sensitization 1, 1A, 1B	P302 + P352
	IF ON SKIN: Wash with plenty of soap and water/
	P363
	Wash contaminated clothing before reuse.
	<u>P362 + P364</u>
	Take off contaminated clothing and wash it before reuse

Justification

Acute toxicity, dermal category 4 and skin sensitization 1, 1A and 1B should also be assigned an instruction to remove contaminated clothing since this will occur within the scope of 'IF ON SKIN:' – removal of contaminated clothing is advisable if contaminant has also got into contact with skin.

Currently there is a mixture of precautionary statements advising single actions (e.g. "Remove/Take off immediately all contaminated clothing" and "Wash contaminated clothing before reuse") and what are in effect combination statements (e.g. "Take off contaminated clothing and wash before reuse"). Adding the partial statement 'and wash it before reuse' makes the situation simpler by allowing all the statements to give single instructions. It also enables combination statements to be formed when appropriate, e.g. P361 + P364 "Remove/Take off immediately all contaminated clothing and wash it before reuse".

P363 is preserved as a single statement since for Skin corrosion and flammable liquids it is not possible to combine it with P361 "Remove/Take off immediately all contaminated clothing", as P361 is followed by P353, "Rinse skin with water/shower".

Adding 'it' in "Remove/Take off immediately all contaminated clothing and wash it before reuse" etc. makes clear that it is the clothing (not the skin) that needs to be washed after clothing is removed.

"Remove" means the same as "Take off", so is redundant.

Annex II

Examples of substances with associated precautionary statements with effect of rationalisation proposals

Substances classifications are those listed in Table 3.1 of part 3 of Annex 3 of Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. The unofficial consolidated table available at http://ecb.jrc.ec.europa.eu/classification-labelling has been used.

Example 1: Hydrazine bis(3-carboxy-4-hydroxybenzensulfonate)

Classification

Carc 1B

Acute tox 4

Skin Corr 1B

Skin Sens 1

H412

Aquatic Chronic 3

Hazard statements

H350	May cause cancer
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H317	May cause an allergic skin reaction

Precautionary statements

P201	Obtain special instructions before use
P202	Do not handle until all safety precautions have been read and understood
P260	Do not breathe dusts or mists
P261	Avoid breathing dust/fume/gas/mist/vapours/spray
P264	Wash thoroughly after handling
P270	Do not eat, drink or smoke when using this product
P272	Contaminated work clothing should not be allowed out of the workplace
P273	Avoid release to the environment
P280	Wear protective gloves
P280	Wear protective gloves/protective clothing/eye protection/face protection

Harmful to aquatic life with long lasting effects

Precautionary statements

P281	Use personal protective equipment as required
P301 + P312	IF swallowed: call a POISON CENTER or doctor/physician if you feel unwell
P301 + P330 + P331	IF swallowed: Rinse mouth. Do NOT induce vomiting
P302 + P352	IF ON SKIN: Wash with plenty of soap and water
P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P310	Immediately call a POISON CENTER or doctor/physician
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313	If exposed or concerned: Get medical advice/attention
P321	Specific treatment (see on this label)
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention
P363	Wash contaminated clothing before reuse
P405	Store locked up
P501	Dispose of contents/container to

${\bf Precaution ary\ statements\ after\ rationalisation\ proposals\ applied}$

P201	Obtain special instructions before use
P202	Do not handle until all safety precautions have been read and understood
P260	Do not breathe dusts or mists
P261	Avoid breathing dust/fume/gas/mist/vapours/spray
P264	Wash thoroughly after handling
P270	Do not eat, drink or smoke when using this product
P272	Contaminated work clothing should not be allowed out of the workplace
P273	Avoid release to the environment
P280	Wear protective gloves
P280	Wear protective gloves/protective clothing/eye protection/face protection
P281	Use personal protective equipment as required
P301 + P312	IF SWALLOWED: call a POISON CENTER-or/doctor/physician if you feel unwell

Precautionary statements after rationalisation proposals applied

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
P302 + P352 IF ON SKIN: Wash with plenty of soap and water/...

P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse

skin with water/shower.

P304 + P340 IF INHALED: Remove victim person to fresh air and keep at rest in a position ensure

comfortable for breathing

P310 Immediately call a POISON CENTER-or/doctor/physician....

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses,

if present and easy to do. Continue rinsing.

P308 + P313 If exposed or concerned: Get medical advice/attention

P321 Specific treatment (see... on this label)

P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.

<u>P362 + P364</u> <u>Take off contaminated clothing and wash it before re-use</u>

P363 Wash contaminated clothing before reuse

P405 Store locked up

P501 Dispose of contents/container to...

Precautionary statements after rationalisation proposals applied (clean)

P201 Obtain special instructions before use

P202 Do not handle until all safety precautions have been read and understood

P260 Do not breathe dusts or mists

P264 Wash... thoroughly after handling

P270 Do not eat, drink or smoke when using this product

P272 Contaminated work clothing should not be allowed out of the workplace

P273 Avoid release to the environment

P280 Wear protective gloves

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

 $[comment: appropriate\ PPE\ would\ need\ to\ be\ specified\ to\ cover\ all\ hazards\ of$

substance]

P301 + P312 IF SWALLOWED: call a POISON CENTER/doctor... if you feel unwell

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

P302 + P352 IF ON SKIN: Wash with plenty of water/...

Precautionary statements after rationalisation proposals applied (clean)

P303 + P361 + P353IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. P304 + P340 IF INHALED: Remove person to fresh air and ensure comfortable breathing P310 Immediately call a POISON CENTER doctor P305 + P351 + P338IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If exposed or concerned: Get medical advice/attention P308 + P313P321 Specific treatment (see... on this label) P333 + P313 If skin irritation or rash occurs: Get medical advice/attention. P362 + P364 Take off contaminated clothing and wash it before re-use

P501 Dispose of contents/container to...

Example 2: Hexyl acrylate (CAS no: 2499-95-8)

Classification

Eye irritancy 2

STOT SE 3

Skin irritancy 2

Skin sensitisation 1

Aquatic chronic 2

Hazard statements

H319	Causes serious eye irritation
H335	May cause respiratory irritation
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H411	Toxic to aquatic life with long lasting effects

Precautionary statements

P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash thoroughly after handling
P271	Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear eye protection/face protection.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water
P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P321	Specific treatment (see on this label)
P332 + P313	If skin irritation occurs: Get medical advice/attention.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
P337 + P313	If eye irritation persists: Get medical advice/attention
P362	Take off contaminated clothing and wash before reuse

Precautionary statements

P363 Wash contaminated clothing before reuse

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

P405 Store locked up

P501 Dispose of contents/container to...

Precautionary statements after rationalisation proposals applied

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P264 Wash ... thoroughly after handling

P271 Use only outdoors or in a well-ventilated area.

P272 Contaminated work clothing should not be allowed out of the workplace.

P273 Avoid release to the environment.

P280 Wear eye protection/face protection.

P302 + P352 IF ON SKIN: Wash with plenty of soap and water/...

P304 + P340 IF INHALED: Remove victim person to fresh air and keep at rest in a position ensure

comfortable for breathing

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses,

if present and easy to do. Continue rinsing.

P312 Call a POISON CENTER-or/doctor/physician... if you feel unwell.

P321 Specific treatment (see ... on this label)

P332 + P313 If skin irritation occurs: Get medical advice/attention.

P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.

P337 + P313 If eye irritation persists: Get medical advice/attention

P362 Take off contaminated clothing and wash before reuse

P363 Wash contaminated clothing before reuse

P362 + P364 Take off contaminated clothing and wash it before reuse

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

P405 Store locked up

P501 Dispose of contents/container to...

Precautionary statements after rationalisation proposals applied (clean)

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P264 Wash ... thoroughly after handling

P271 Use only outdoors or in a well-ventilated area.

P272 Contaminated work clothing should not be allowed out of the workplace.

P273 Avoid release to the environment.

P280 Wear eye protection/face protection.

P302 + P352 IF ON SKIN: Wash with plenty of water/...

P304 + P340 IF INHALED: Remove person_to fresh air and ensure comfortable breathing

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses,

if present and easy to do. Continue rinsing.

P312 Call a POISON CENTER/doctor ... if you feel unwell.

P321 Specific treatment (see ... on this label)

P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.

P337 + P313 If eye irritation persists: Get medical advice/attention

P362 + P364 Take off contaminated clothing and wash it before reuse

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

P405 Store locked up

P501 Dispose of contents/container to...

Example 3: 2,2-dibromo-2-nitroethanol (CAS no: 69094-18-4)

Classification

Explosive 1.1

Carcinogenic 2

Acute Tox. 4

STOT RE 2

Skin Corr. 1A

Skin Sens. 1

Aquatic Acute 1

Aquatic Chronic 1

Hazard statements

H201	Explosive; mass explosion hazard
H302	Harmful if swallowed
H314	Causes severe burns and eye damage
H317	May cause an allergic skin reaction
H351	Suspected of causing cancer
H373	May cause damage to organs through prolonged or repeated exposure
H410	Very toxic to aquatic life with long lasting effects

Precautionary statements

P201	Obtain special instructions before use
P202	Do not handle until all safety precautions have been read and understood
P210	Keep away from heat/sparks/open flames/hot surfaces. — No smoking.
P230	Keep wetted with
P240	Ground/bond container and receiving equipment
P250	Do not subject to grinding/shock//friction.
P260	Do not breathe dust/fume/gas/mist/vapours/spray
P261	Avoid breathing dust/fume/gas/mist/vapours/spray
P264	Wash thoroughly after handling
P270	Do not eat, drink or smoke when using this product
P272	Contaminated work clothing should not be allowed out of the workplace

Precautionary statements

P405

P501

Store locked up

Dispose of contents/container to

P273 Avoid release to the environment P280 Wear protective gloves/protective clothing/eye protection/face protection P281 Use personal protective equipment as required P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting P302+P352 IF ON SKIN: Wash with plenty of soap and water P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing P310 Immediately call a POISON CENTER or doctor/physician P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing P308+P313 IF exposed or concerned: Get medical advice/attention P333+P313 If skin irritation or rash occurs: Get medical advice/attention P370+380 In case of fire: Evacuate area P314 Get medical advice/attention if you feel unwell P321 Specific treatment (see ... on this label) P330 Rinse mouth Wash contaminated clothing before reuse P363 P372 Explosion risk in case of fire P373 DO NOT fight fire when fire reaches explosives P391 Collect spillage P401 Store ...in accordance with local/regional/national/international regulations (to be specified)

Precautionary statements after rationalisation proposals applied

P201	Obtain special instructions before use
P202	Do not handle until all safety precautions have been read and understood
P210	Keep away from heat/sparks/open flames/hot surfaces. — No smoking.
P230	Keep wetted with
P240	Ground/bond container and receiving equipment
P250	Do not subject to grinding/shock//friction.
P260	Do not breathe dust/fume/gas/mist/vapours/spray
P261	Avoid breathing dust/fume/gas/mist/vapours/spray
P264	Wash thoroughly after handling
P270	Do not eat, drink or smoke when using this product
P272	Contaminated work clothing should not be allowed out of the workplace
P273	Avoid release to the environment
P280	Wear protective gloves/protective clothing/eye protection/face protection
P281	Use personal protective equipment as required
P301+P312	IF SWALLOWED: Call a POISON CENTER-or/doctor/physician if you feel unwell
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
P302+P352	IF ON SKIN: Wash with plenty of soap and water/
P303+P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
P304+P340	IF INHALED: Remove victim person to fresh air and keep at rest in a position ensure comfortable for breathing
P310	Immediately a POISON CENTER-or_doctor/physician
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P308+P313	IF exposed or concerned: Get medical advice/attention
P333+P313	If skin irritation or rash occurs: Get medical advice/attention
P370+380	In case of fire: Evacuate area
P314	Get medical advice/attention if you feel unwell
P321	Specific treatment (see on this label)
P330	Rinse mouth
P362 + P364	Take off contaminated clothing and wash it before re-use

Wash contaminated clothing before reuse

P363

Precautionary statements after rationalisation proposals applied

P372 Explosion risk in case of fire

P373 DO NOT fight fire when fire reaches explosives

P391 Collect spillage

P401 Store ...in accordance with local/regional/national/international regulations (to be

specified)

P405 Store locked up

P501 Dispose of contents/container to

Precautionary statements after rationalisation proposals applied (clean)

P201 Obtain special instructions before use P202 Do not handle until all safety precautions have been read and understood P210 Keep away from heat/sparks/open flames/hot surfaces. — No smoking. P230 Keep wetted with ... P240 Ground/bond container and receiving equipment P250 Do not subject to grinding/shock/.../friction. P260 Do not breathe dust/fume/gas/mist/vapours/spray P264 Wash ... thoroughly after handling

P270 Do not eat, drink or smoke when using this product

P272 Contaminated work clothing should not be allowed out of the workplace

P273 Avoid release to the environment

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

P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor ... if you feel unwell

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

P302+P352 IF ON SKIN: Wash with plenty of water/...

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

water/shower

P304+P340 IF INHALED: Remove person to fresh air and ensure comfortable breathing

P310 Immediately a POISON CENTER/doctor ...

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing

P308+P313 IF exposed or concerned: Get medical advice/attention

If skin irritation or rash occurs: Get medical advice/attention P333+P313

Precautionary statements after rationalisation proposals applied (clean)

P370+380 In case of fire: Evacuate area

P314 Get medical advice/attention if you feel unwell

P321 Specific treatment (see ... on this label)

P330 Rinse mouth

P362 + P364 Take off contaminated clothing and wash it before re-use

P372 Explosion risk in case of fire

P373 DO NOT fight fire when fire reaches explosives

P391 Collect spillage

P401 Store ...in accordance with local/regional/national/international regulations (to be

specified)

P405 Store locked up

P501 Dispose of contents/container to

Annex III

Changes to Annex 3 of GHS resulting from rationalisation proposals

(*Note:* inserted text is underlined, deleted text is indicated in strikethrough)

1. Amend Annex 3, section 2, paragraph A3.2.3.7 to read:

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

2. Amend Tables 3.2.1, 3.2.2, 3.2.3, 3.2.4 and 3.2.5 to read as follows:

"Table A3.2.1: Codification of general precautionary statements

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

Table A3.2.2: Codification of prevention precautionary statements

Code	Prevention precautionary statements	Hazard class	Hazard category	Conditions for use
(1)	(2)	(3)	(4)	(5)
P201	Obtain special instructions before use.	Explosives (chapter 2.1)	Unstable explosive	
		Germ cell mutagenicity (chapter 3.5)	1A, 1B, 2	
		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	
	understood.	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	Prevention precautionary statements	Hazard class	Hazard category	Conditions for use
(1)	(2)	(3)	(4)	(5)
P210	Keep away from heat/sparks/open flames/hot surfaces No smoking.	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 source(s).
		Flammable gases (chapter 2.2)	1, 2	
		Flammable aerosols (chapter 2.3)	1, 2	
		Flammable liquids (chapter 2.6)	1, 2, 3	
		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	
		Organic peroxides (chapter 2.15)	Types A, B, C, D, E, F	
		Flammable liquids (chapter 2.6)	4	- specify to keep away from flames and hot surfaces.
		Oxidizing liquids (chapter 2.13)	1, 2, 3	- specify to keep away from heat.
		Oxidizing solids (chapter 2.14)	1, 2, 3	
P211	Do not spray on an open flame or other ignition source.	Flammable aerosols (chapter 2.3)	1, 2	
P220	Keep/Store away from	Oxidizing gases (chapter 2.4)	1	Manufacturer/supplier or the
1 220	clothing//combustible materials.	Self-reactive substances and mixtures (chapter 2.8)	Types A, B, C, D, E, F	competent authority to specify other incompatible materials.
		Oxidizing liquids (chapter 2.13)	2, 3	
		Oxidizing solids (chapter 2.14)	2, 3	
		Organic peroxides (chapter 2.15)	Types A, B, C, D, E, F	
		Oxidizing liquids (chapter 2.13)	1	- specify to keep away from
		Oxidizing solids (chapter 2.14)	1	clothing and other combustible materials.

Code	Prevention precautionary statements	Hazard class	Hazard category	Conditions for use
(1)	(2)	(3)	(4)	(5)
P221	Take any precaution to avoid mixing	Oxidizing liquids (chapter 2.13)	1, 2, 3	Manufacturer/supplier or the
	with combustibles/	Oxidizing solids (chapter 2.14)	1, 2, 3	competent authority to specify other incompatible materials.
P222	Do not allow contact with air.	Pyrophoric liquids (chapter 2.9)	1	
		Pyrophoric solids (chapter 2.10)	1	
P223	Keep away from any possible contact with water, because of violent reaction and possible flash fire.	Substances and mixtures which, in contact with water, emit flammable gases (chapter 2.12)	1, 2	
P230	Keep wetted with	Explosives (chapter 2.1)	Divisions 1.1, 1.2, 1.3, 1.5	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).
P231	Handle under inert gas.	Substances and mixtures which, in contact with water, emit flammable gases (chapter 2.12)	1, 2, 3	
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	
		Acute toxicity, inhalation (chapter 3.1)	1, 2, 3	- if product is volatile so as to
		Specific target organ toxicity, single exposure; respiratory tract irritation (chapter 3.8)	3	generate hazardous atmosphere.
		Specific target organ toxicity, single exposure; narcotic effects (chapter 3.8)	3	
P234	Keep only in original container.	Self-reactive substances and mixtures (chapter 2.8)	Types A, B, C, D, E, F	
		Organic peroxides (chapter 2.15)	Types A, B, C, D, E, F	

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Code	Prevention precautionary statements	Hazard class	Hazard category	Conditions for use
(1)	(2)	(3)	(4)	(5)
		Substances and mixtures corrosive to metals (chapter 2.16)	1	
P235	Keep cool.	Flammable liquids (chapter 2.6)	1, 2, 3, 4	
		Self-reactive substances and mixtures (chapter 2.8)	Types A, B, C, D, E, F	
		Self-heating substances and mixtures (chapter 2.11)	1, 2	
		Organic peroxides (chapter 2.15)	Types A, B, C, D, E, F	
P240	Ground/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.
		Flammable liquids (chapter 2.6)	1, 2, 3	 if electrostatically sensitive material is for reloading. if product is volatile so as to generate hazardous atmosphere.
		Flammable solids (chapter 2.7)	1, 2	- if electrostatically sensitive material is for reloading.
P241	Use explosion-proof electrical/ventilating/lighting// equipment.	Flammable liquids (chapter 2.6)	1, 2, 3	Manufacturer/supplier or the competent authority to specify other equipment.
		Flammable solids (chapter 2.7)	1, 2	Manufacturer/supplier or the competent authority to specify other equipment if dust clouds can occur.
P242	Use only non-sparking tools.	Flammable liquids (chapter 2.6)	1, 2, 3	

Code	Prevention precautionary statements	Hazard class	Hazard category	Conditions for use
(1)	(2)	(3)	(4)	(5)
P243	Take precautionary measures against static discharge.	Flammable liquids (chapter 2.6)	1, 2, 3	
P244	Keep reduction valves and fittings free from grease and oil oil and grease.	Oxidizing gases (chapter 2.4)	1	
P250	Do not subject to grinding/shock//friction.	Explosives (chapter 2.1)	Divisions 1.1, 1.2, 1.3, 1.4, 1.5	Manufacturer/supplier or the competent authority to specify applicable rough handling.
P251	Pressurized container: Do not pierce or burn, even after use.	Flammable aerosols (chapter 2.3)	1, 2	
P260	Do not breathe dust/fume/gas/mist/vapours/spray.	Acute toxicity – inhalation (chapter 3.1)	1, 2	Manufacturer/supplier or the
		Specific target organ toxicity, single exposure (chapter 3.8)	1, 2	competent authority to specify applicable conditions
		Specific target organ toxicity, repeated exposure (chapter 3.9)	1, 2	
		Skin corrosion (chapter 3.2)	1A, 1B, 1C	- specify do not breathe dusts or
		Reproductive toxicity – effects on or via lactation (chapter 3.7)	Additional category	mists - if inhalable particles of dusts or mists may occur during use.
P261	Avoid breathing	Acute toxicity – inhalation (chapter 3.1)	3, 4	Manufacturer/supplier or the
	dust/fume/gas/mist/vapours/spray.	Respiratory sensitization (chapter 3.4)	1, 1A, 1B	competent authority to specify
		Skin sensitization (chapter 3.4)	1, 1A, 1B	applicable conditions. -may be omitted if P260 is given
		Specific target organ toxicity, single exposure; respiratory tract irritation (chapter 3.8)	3	on label
		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/while nursing.	Reproductive toxicity – effects on or via lactation (chapter 3.7)	Additional category	

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Code	Prevention precautionary statements	Hazard class	Hazard category	Conditions for use
(1)	(2)	(3)	(4)	(5)
P264	Wash thoroughly after handling.	Acute toxicity – oral (chapter 3.1)	1, 2, 3, 4	Manufacturer/supplier or the
		Acute toxicity – dermal (chapter 3.1)	1, 2	competent authority to specify
		Skin corrosion (chapter 3.2)	1A, 1B, 1C	parts of the body to 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	
		Specific target organ toxicity, repeated exposure (chapter 3.9)	1	
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 well-	Acute toxicity – inhalation (chapter 3.1)	1, 2, 3, 4	
	ventilated area.	Specific target organ toxicity, single exposure; respiratory tract irritation (chapter 3.8)	3	
		Specific target organ toxicity, single exposure; narcotic effects (chapter 3.8)	3	
P272	Contaminated work clothing should not be allowed out of the workplace.	Skin sensitization (chapter 3.4)	1, 1A, 1B	

Code	Prevention precautionary statements	Hazard class	Hazard category	Conditions for use
(1)	(2)	(3)	(4)	(5)
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)	<u>Unstable</u> <u>explosive</u>	Manufacturer/supplier or the competent authority to specify type of equipment
		Explosives (chapter 2.1)	Divisions 1.1, 1.2, 1.3, 1.4, 1.5	- Specify face protection. Manufacturer/supplier or the competent authority to specify type of equipment.
		Flammable liquids (chapter 2.6)	1, 2, 3, 4	- Specify protective gloves and
		Flammable solids (chapter 2.7)	1, 2	eye/face protection. Manufacturer/supplier or the competent authority to specify type of equipment.
		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	
		Self-heating substances and mixtures (chapter 2.11)	1, 2	
		Substances and mixtures which, in contact with water, emit flammable gases (chapter 2.12)	1, 2, 3	
		Oxidizing liquids (chapter 2.13)	1, 2, 3	
		Oxidizing solids (chapter 2.14)	1, 2, 3	
		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 type of equipment.

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Code	Prevention precautionary statements	Hazard class	Hazard category	Conditions for use
(1)	(2)	(3)	(4)	(5)
		Skin corrosion (chapter 3.2)	1A, 1B, 1C	- Specify protective gloves/clothing and eye/face protection. Manufacturer/supplier or the competent authority to specify 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 type of equipment.
		Severe eye damage (chapter 3.3)	1	- Specify eye/face protection.
		Eye irritation (chapter 3.3)	2A	Manufacturer/supplier or the competent authority to specify type of equipment.
		Germ cell mutagenicity (chapter 3.5)	<u>1A, 1B, 2</u>	Manufacturer or the competent
		Carcinogenicity (chapter 3.6)	<u>1A, 1B, 2</u>	authority to specify type of equipment
		Reproductive toxicity (chapter 3.7)	<u>1A, 1B, 2</u>	
P281	Use personal protective equipment as required.	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	
P282	Wear cold insulating gloves/face shield/eye protection.	Gases under pressure (chapter 2.5)	Refrigerated liquefied gas	
P283	Wear fire/flame resistant/retardant	Oxidizing liquids (chapter 2.13)	1	
	clothing.	Oxidizing solids (chapter 2.14)	1	

Code	Prevention precautionary statements	Hazard class	Hazard category	Conditions for use
(1)	(2)	(3)	(4)	(5)
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	Manufacturer/supplier or the competent authority to specify equipment. - text in square brackets may be used where additional safety
P285	In aggs of inadequate ventilation were	Description (shorter 2.4)	1 1A 1D	information regarding adequate ventilation is provided Manufacture of the
17283	In case of inadequate ventilation wear respiratory protection.	Respiratory sensitization (chapter 3.4)	1, 1A, 1B	Manufacturer/supplier or the competent authority to specify equipment.
	,		1	
P231 + P232	Handle under inert gas. Protect from moisture.	Substances and mixtures which, in contact with water, emit flammable gases (chapter 2.12)	1, 2, 3	
P235 + P410	Keep cool. Protect from sunlight.	Self-heating substances and mixtures (chapter 2.11)	1, 2	

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 Table A3.2.3: Codification of response precautionary statements

Code	Response precautionary statements	Hazard class	Hazard category	Conditions for use
(1)	(2)	(3)	(4)	(5)
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	
		Acute toxicity, dermal (chapter 3.1)	1, 2, 3, 4	
		Skin irritation (chapter 3.2)	2	
		Skin sensitization (chapter 3.4)	1, 1A, 1B	
P303	IF ON SKIN (or hair):	Flammable liquids (chapter 2.6)	1, 2, 3	
		Skin corrosion (chapter 3.2)	1A, 1B, 1C	
P304	IF INHALED:	Acute toxicity, inhalation (chapter 3.1)	1, 2, 3, 4, 5	
		Skin corrosion (chapter 3.2)	1A, 1B, 1C	
		Respiratory sensitization (chapter 3.4)	1, 1A, 1B	
		Specific target organ toxicity, single exposure; respiratory tract irritation (chapter 3.8)	3	
		Specific target organ toxicity, single exposure; narcotic effects (chapter 3.8)	3	
P305	IF IN EYES:	Skin corrosion (chapter 3.2)	1A, 1B, 1C	
		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	
P307	IF exposed:	Specific target organ toxicity, single exposure (chapter 3.8)	1	

Code	Response precautionary statements	Hazard class	Hazard category	Conditions for use
(1)	(2)	(3)	(4)	(5)
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)	<u>1, 2</u>	
P309	IF exposed or if you feel unwell:	Specific target organ toxicity, single exposure (chapter 3.8)	2	
P310	Immediately call a POISON CENTER	Acute toxicity, oral (chapter 3.1)	1, 2, 3	Manufacturer/supplier or the
	or / doctor/ physician/	Acute toxicity, dermal (chapter 3.1)	1, 2	competent authority to specify
		Acute toxicity, inhalation (chapter 3.1)	1, 2	the appropriate source of emergency medical advice.
		Skin corrosion (chapter 3.2)	1A, 1B, 1C	emergency medicar advice.
		Severe eye damage (chapter 3.3)	1	
		Aspiration hazard (chapter 3.10)	1, 2	
P311	Call a POISON CENTER or /	Acute toxicity, inhalation (chapter 3.1)	3	Manufacturer/supplier or the
	doctor /physician /	Respiratory sensitization (chapter 3.4)	1, 1A, 1B	competent authority to specify
		Specific target organ toxicity, single exposure (chapter 3.8)	1, 2	the appropriate source of emergency medical advice.
P312	Call a POISON CENTER or	Acute toxicity, oral (chapter 3.1)	4	Manufacturer/supplier or the
	/doctor/ physician/ if you feel unwell.	Acute toxicity, oral (chapter 3.1)	5	competent authority to specify
		Acute toxicity, dermal (chapter 3.1)	3, 4, 5	the appropriate source of emergency medical advice.
		Acute toxicity, inhalation (chapter 3.1)	4	emergency medicar advice.
		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	

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Code	Response precautionary statements	Hazard class	Hazard category	Conditions for use
(1)	(2)	(3)	(4)	(5)
P313	Get medical advice/attention.	Skin irritation (chapter 3.2)	2, 3	
		Eye irritation (chapter 3.3)	2A, 2B	
		Skin sensitization (chapter 3.4)	1, 1A, 1B	
		Germ cell mutagenicity (chapter 3.5)	1A, 1B, 2	
		Carcinogenicity (chapter 3.6)	1A, 1B, 2	
		Reproductive toxicity (chapter 3.7)	1A, 1B, 2	
		Reproductive toxicity, effects on or via lactation (chapter 3.7)	Additional category	
P314	Get medical advice/attention if you feel unwell.	Specific target organ toxicity, repeated exposure (chapter 3.9)	1, 2	
P315	Get immediate medical advice/attention.	Gases under pressure (chapter 2.5)	Refrigerated liquefied gas	
P320	Specific treatment is urgent (see on this label).	Acute toxicity, inhalation (chapter 3.1)	1, 2	 Reference to supplemental first aid instruction.- if immediate administration of antidote is required.
P321	Specific treatment (see on this label).	Acute toxicity, oral (chapter 3.1)	1, 2, 3	 Reference to supplemental first aid instruction.- if immediate administration of antidote is required.
		Acute toxicity, inhalation (chapter 3.1)	3	 Reference to supplemental first aid instruction.- if immediate specific measures are required.
		Skin corrosion (chapter 3.2)	1A, 1B, 1C	Reference to supplemental first
		Skin irritation (chapter 3.2)	2	aid instruction.
		Skin sensitization (chapter 3.4)	1, 1A, 1B	- manufacturer/supplier or competent authority may specify a cleansing agent if appropriate.

Code	Response precautionary statements	Hazard class	Hazard category	Conditions for use
(1)	(2)	(3)	(4)	(5)
		Specific target organ toxicity, single exposure (chapter 3.8)	1	 Reference to supplemental first aid instruction.- if immediate measures are required.
		Acute toxicity, dermal (chapter 3.1)	<u>1, 2</u>	Reference to supplemental
		Acute toxicity, dermal (chapter 3.1)	3,4	first aid instruction. - if immediate measures such as specific cleansing agent is advised.
P322	Specific measures (see on this	Acute toxicity, dermal (chapter 3.1)	1, 2	Reference to supplemental first
	label).	Acute toxicity, dermal (chapter 3.1)	3, 4	aid instruction. — if immediate measures such as specific cleansing agent is advised.
			_	
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/wrap in wet	Pyrophoric liquids (chapter 2.9)	1	
	bandages.	Pyrophoric solids (chapter 2.10)	1	
		Substances and mixtures which, in contact with water, emit flammable gases (chapter 2.12)	1, 2	
P335	Brush off loose particles from skin.	Pyrophoric solids (chapter 2.10)	1	
		Substances and mixtures which, in contact with water, emit flammable gases (chapter 2.12)	1, 2	
P336	Thaw frosted parts with lukewarm water. Do not rub affected area.	Gases under pressure (chapter 2.5)	Refrigerated liquefied gas	
P337	If eye irritation persists:	Eye irritation (chapter 3.3)	2A, 2B	

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Code	Response precautionary statements	Hazard class	Hazard category	Conditions for use
(1)	(2)	(3)	(4)	(5)
P338	Remove contact lenses, if present and	Skin corrosion (chapter 3.2)	1A, 1B, 1C	
	easy to do. Continue rinsing.	Severe eye damage (chapter 3.3)	1	
		Eye irritation (chapter 3.3)	2A, 2B	
P340	Remove victim person to fresh air and	Acute toxicity, inhalation (chapter 3.1)	1, 2, 3, 4	
	keep at rest in a position ensure	Skin corrosion (chapter 3.2)	1A, 1B, 1C	
	comfortable for breathing.	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	
P341	If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.	Respiratory sensitization (chapter 3.4)	1, 1A, 1B	
P342	If experiencing respiratory symptoms:	Respiratory sensitization (chapter 3.4)	1, 1A, 1B	
P350	Gently wash with plenty of soap and water.	Acute toxicity, dermal (chapter 3.1)	1,2	
P351	Rinse cautiously with water for	Skin corrosion (chapter 3.2)	1A, 1B, 1C	
	several minutes.	Severe eye damage (chapter 3.3)	1	
		Eye irritation (chapter 3.3)	2A, 2B	
P352	Wash with plenty of water/ soap	Acute toxicity, dermal (chapter 3.1)	<u>1, 2,</u> 3, 4	Manufacturer/supplier or the
	and water.	Skin irritation (chapter 3.2)	2	competent authority may specify
		Skin sensitization (chapter 3.4)	1, 1A, 1B	a cleansing agent if appropriate, or may recommend an alternative agent in exceptional cases if water is clearly inappropriate.
P353	Rinse skin with water/shower.	Flammable liquids (chapter 2.6)	1, 2, 3	
		Skin corrosion (chapter 3.2)	1A, 1B, 1C	

Code	Response precautionary statements	Hazard class	Hazard category	Conditions for use
(1)	(2)	(3)	(4)	(5)
P360	Rinse immediately contaminated	Oxidizing liquids (chapter 2.13)	1	
	clothing and skin with plenty of water before removing clothes.	Oxidizing solids (chapter 2.14)	1	
P361	Remove/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 and wash before reuse.	Acute toxicity, dermal (chapter 3.1)	4	
	wash before rease.	Skin irritation (chapter 3.2)	2	
		Skin sensitization (chapter 3.4)	1, 1A, 1B	
P363	Wash contaminated clothing before	Acute toxicity, dermal (chapter 3.1)	1, 2, 3	
	reuse.	Acute toxicity, dermal (chapter 3.1)	4	
		Skin corrosion (chapter 3.2)	1A, 1B, 1C	
		Skin sensitization (chapter 3.4)	1, 1A, 1B	
P364	and wash it before reuse	Acute toxicity, dermal (chapter 3.1)	1, 2, 3, 4	
		Skin irritation (chapter 3.2)	<u>2</u>	
		Skin sensitization (chapter 3.4)	<u>1A, 1B</u>	
	1		1	
P370	In case of fire:	Explosives (chapter 2.1)	Divisions 1.1,	
			1.2, 1.3, 1.4, 1.5	
		Oxidizing gases (chapter 2.4)	1.3	
		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	

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Code	Response precautionary statements	Hazard class	Hazard category	Conditions for use
(1)	(2)	(3)	(4)	(5)
P370	In case of fire: (cont'd)	Oxidizing liquids (chapter 2.13)	1, 2, 3	
(cont'd)		Oxidizing solids (chapter 2.14)	1, 2, 3	
P371	In case of major fire and large	Oxidizing liquids (chapter 2.13)	1	
	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, 1.4, 1.5	- except if explosives are 1.4S AMMUNITION AND COMPONENTS THEREOF.
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, 1.5	
P374	Fight fire with normal precautions from a reasonable distance.	Explosives (chapter 2.1)	Division 1.4	- if explosives are 1.4S AMMUNITION AND COMPONENTS THEREOF.
P375	Fight fire remotely due to the risk of explosion.	Self-reactive substances and mixtures (chapter 2.8)	Types A, B	
		Oxidizing liquids (chapter 2.13)	1	
		Oxidizing solids (chapter 2.14)	1	
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	
P378	Use for extinction.	Flammable liquids (chapter 2.6)	1, 2, 3, 4	Manufacturer/supplier or the
		Flammable solids (chapter 2.7)	1, 2	competent authority to specify
		Self-reactive substances and mixtures (chapter 2.8)	Types A, B, C, D, E, F	appropriate media - if water increases risk.
		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	

Code	Response precautionary statements	Hazard class	Hazard category	Conditions for use
(1)	(2)	(3)	(4)	(5)
		Oxidizing liquids (chapter 2.13)	1, 2, 3	
		Oxidizing solids (chapter 2.14)	1, 2, 3	
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	
P381	Eliminate all ignition sources if safe to do so.	Flammable gases (chapter 2.2)	1, 2	
P390	Absorb spillage to prevent material damage.	Substances and mixtures corrosive to metals (chapter 2.16)	1	
P391	Collect spillage.	Hazardous to the aquatic environment, acute hazard (chapter 4.1)	1	
		Hazardous to the aquatic environment, long-term hazard (chapter 4.1)	1, 2	
P301	IF SWALLOWED: Immediately call	Acute toxicity, oral (chapter 3.1)	1, 2, 3	
+ P310	a POISON CENTER-or/ doctor/ physician/	Aspiration hazard (chapter 3.10)	1, 2	
P301	IF SWALLOWED: Call a POISON	Acute toxicity, oral (chapter 3.1)	4	
+ P312	CENTER-or/ doctor/physician/ if you feel unwell.			
P301 +	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.	Skin corrosion (chapter 3.2)	1A, 1B, 1C	
P330 + P331				

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Code	Response precautionary statements	Hazard class	Hazard category	Conditions for use
(1)	(2)	(3)	(4)	(5)
P302 + P334	IF ON SKIN: Immerse in cool water/wrap in wet bandages.	Pyrophoric liquids (chapter 2.9)	1	
+ + P350	IF ON SKIN: Gently wash with plenty of soap and water.	Acute toxicity, dermal (chapter 3.1)	1,2	
P302 +	IF ON SKIN: Wash with plenty of	Acute toxicity, dermal (chapter 3.1)	<u>1, 2,</u> 3, 4	Manufacturer/supplier or the
P352	soap and water/	Skin irritation (chapter 3.2)	2	competent authority may specify
		Skin sensitization (chapter 3.4)	1, 1A, 1B	a cleansing agent if appropriate, or may recommend an alternative agent in exceptional cases if water is clearly inappropriate.
P303 +	IF ON SKIN (or hair): Remove/Take	Flammable liquids (chapter 2.6)	1, 2, 3	
P361 + P353	off immediately all contaminated clothing. Rinse skin with water/shower.	Skin corrosion (chapter 3.2)	1A, 1B, 1C	
P304 + P312	IF INHALED: Call a POISON CENTER-or/doctor/physician/ if you feel unwell.	Acute toxicity, inhalation (chapter 3.1)	5	
P304 +	Remove vietim person to fresh air and	Acute toxicity, inhalation (chapter 3.1)	1, 2, 3, 4	
P340	keep at rest in a position ensure 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	
P304 + P341	IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.	Respiratory sensitization (chapter 3.4)	1, 1A, 1B	
P305 +	IF IN EYES: Rinse cautiously with	Skin corrosion (chapter 3.2)	1A, 1B, 1C	
P351 +	water for several minutes. Remove	Severe eye damage (chapter 3.3)	1	

Code	Response precautionary statements	Hazard class	Hazard category	Conditions for use
(1)	(2)	(3)	(4)	(5)
P338	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	
P307± P308 + P311	IF exposed <u>or concerned</u> : Call a POISON CENTER- or/ doctor/ physician/	Specific target organ toxicity, single exposure (chapter 3.8)	1	
P308 +	IF exposed or concerned: Get	Germ cell mutagenicity (chapter 3.5)	1A, 1B, 2	
P313	medical advice/ attention.	Carcinogenicity (chapter 3.6)	1A, 1B, 2	
		Reproductive toxicity (chapter 3.7)	1A, 1B, 2	
		Reproductive toxicity, effects on or via lactation	Additional	
		(chapter 3.7)	category	
		Specific target organ toxicity, single exposure (chapter 3.8)	<u>1, 2</u>	
P309 P308 + P311	IF exposed or concerned if you feel unwell: Call a POISON CENTER-or/doctor/physician/	Specific target organ toxicity, single exposure (chapter 3.8)	2	
P332 + P313	If skin irritation occurs: Get medical advice/ attention.	Skin irritation (chapter 3.2)	2, 3	- may be omitted when P333 + P313 appears on the label
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.	Skin sensitization (chapter 3.4)	1, 1A, 1B	
P335 +	Brush off loose particles from skin.	Pyrophoric solids (chapter 2.10)	1	
P334	Immerse in cool water/wrap in wet bandages.	Substances and mixtures which, in contact with water, emit flammable gases (chapter 2.12)	1, 2	
P337 + P313	If eye irritation persists: Get medical advice/attention.	Eye irritation (chapter 3.3)	2A, 2B	
P342 + P311	If experiencing respiratory symptoms: Call a POISON CENTER-or/ doctor/ physician/	Respiratory sensitization (chapter 3.4)	1, 1A, 1B	

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Code	Response precautionary statements	Hazard class	Hazard category	Conditions for use
(1)	(2)	(3)	(4)	(5)
<u>P361 +</u> <u>P364</u>	Take off immediately all contaminated clothing and wash it before reuse.	Acute toxicity, dermal (chapter 3.1)	1, 2, 3	
<u>P362 +</u>	Take off contaminated clothing and	Acute toxicity, dermal (chapter 3.1)	<u>1, 2, 3</u>	
<u>P364</u>	wash it before reuse.	Skin irritation (chapter 3.2)	<u>2</u>	
		Skin sensitisation (chapter 3.4)	<u>1A, 1B</u>	
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 for extinction.	Flammable liquids (chapter 2.6)	1, 2, 3, 4	Manufacturer/supplier or the
P378		Flammable solids (chapter 2.7)	1, 2	competent authority to specify
		Self-reactive substances and mixtures (chapter 2.8)	Types A, B, C, D, E, F	appropriate media if water increases risk.
		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	
P370 + P380	In case of fire: Evacuate area.	Explosives (chapter 2.1)	Divisions 1.1, 1.2, 1.3, 1.4, 1.5	
P370 + P380 + P375	In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion.	Self-reactive substances and mixtures (chapter 2.8)	Types A, B	
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	

Table A3.2.4: Codification of storage precautionary statements

Code	Storage precautionary statements	Hazard class	Hazard category	Conditions for use
(1)	(2)	(3)	(4)	(5)
P401	Store	Explosives (chapter 2.1)	Unstable explosives and Divisions 1.1, 1.2, 1.3, 1.4, 1.5	in accordance with local/regional/national/international regulations (to be specified).
P402	Store in a dry place.	Substances and mixtures which, in contact with water, emit flammable gases (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	
		Self-reactive substances and mixtures (chapter 2.8)	Types A, B, C, D, E, F	
		Acute toxicity, inhalation (chapter 3.1)	1, 2, 3	- if product is volatile so as to
		Specific target organ toxicity, single exposure; respiratory tract irritation (chapter 3.8)	3	generate hazardous atmosphere.
		Specific target organ toxicity, single exposure; narcotic effects (chapter 3.8)	3	
P404	Store in a closed container.	Substances and mixtures which, in contact with water, emit flammable gases (chapter 2.12)	1, 2, 3	

(1)	(2)	(3)	(4)	(5)
P405	Store locked up.	Acute toxicity, oral (chapter 3.1)	1, 2, 3	
		Acute toxicity, dermal (chapter 3.1)	1, 2, 3	
		Acute toxicity, inhalation (chapter 3.1)	1, 2, 3]
		Skin corrosion (chapter 3.2)	1A, 1B, 1C	
		Germ cell mutagenicity (chapter 3.5)	1A, 1B, 2	
		Carcinogenicity (chapter 3.6)	1A, 1B, 2	
		Reproductive toxicity (chapter 3.7)	1A, 1B, 2	
		Specific target organ toxicity, single exposure (chapter 3.8)	1, 2	
		Specific target organ toxicity, single exposure; respiratory tract irritation (chapter 3.8)	3	
		Specific target organ toxicity, single exposure; narcotic effects (chapter 3.8)	3	
		Aspiration hazard (chapter 3.10)	1, 2	
P406	Store in corrosive resistant/ container with a resistant inner liner.	Substances and mixtures corrosive to metals (chapter 2.16)	1	Manufacturer/supplier or the competent authority to specify other compatible materials.
P407	Maintain air gap between stacks/pallets.	Self-heating substances and mixtures (chapter 2.11)	1, 2	
			·	
P410	Protect from sunlight.	Flammable aerosols (chapter 2.3)	1, 2	
		Gases under pressure (chapter 2.5)	Compressed gas	
			Liquefied gas	-
			Dissolved gas	-
		Self-heating substances and mixtures (chapter 2.11)	1, 2	
		Organic peroxides (chapter 2.15)	Types A, B, C, D, E, F	

Hazard class

Hazard

category

Conditions for use

Code

Storage precautionary statements

Code	Storage precautionary statements	Hazard class	Hazard category	Conditions for use
(1)	(2)	(3)	(4)	(5)
P411	Store at temperatures not exceeding°C/°F.	Self-reactive substances and mixtures (chapter 2.8)	Types A, B, C, D, E, F	Manufacturer/supplier or the competent authority to specify
		Organic peroxides (chapter 2.15)	Types A, B, C, D, E, F	temperature.
P412	Do not expose to temperatures exceeding 50 °C/ 122 °F.	Flammable aerosols (chapter 2.3)	1, 2	
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.
P420	Store away from other materials.	Self-reactive substances and mixtures (chapter 2.8)	Types A, B, C, D, E, F	
		Self-heating substances and mixtures (chapter 2.11)	1, 2	
		Organic peroxides (chapter 2.15)	Types A, B, C, D, E, F	
P422	Store contents under	Pyrophoric liquids (chapter 2.9)	1	Manufacturer/supplier or the
		Pyrophoric solids (chapter 2.10)	1	competent authority to specify appropriate liquid or inert gas.
P402 + P404	Store in a dry place. Store in a closed container.	Substances and mixtures which, in contact with water, emit flammable gases (chapter 2.12)	1, 2, 3	
P403	Store in a well-ventilated place. Keep	Acute toxicity, inhalation (chapter 3.1)	1, 2, 3	- if product is volatile so as to
P233	container tightly closed.	Specific target organ toxicity, single exposure; respiratory tract irritation (chapter 3.8)	3	generate hazardous atmosphere.
		Specific target organ toxicity, single exposure; narcotic effects (chapter 3.8)	3	

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Code	Storage precautionary statements	Hazard class	Hazard category	Conditions for use
(1)	(2)	(3)	(4)	(5)
P403	Store in a well-ventilated place. Keep	Flammable liquids (chapter 2.6)	1, 2, 3, 4	
+ P235	cool.	Self-reactive substances and mixtures (chapter 2.8)	Types A, B, C, D, E, F	
P410	Protect from sunlight. Store in a well-	Gases under pressure (chapter 2.5)	Compressed gas	
+ P403			Liquefied gas	
1 403			Dissolved gas	
P410 + P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.	Flammable aerosols (chapter 2.3)	1, 2	
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.

Table A3.2.5: Codification of disposal precautionary statements

Code	Disposal precautionary statements	Hazard class	Hazard category	Conditions for use
(1)	(2)	(3)	(4)	(5)
P501	Dispose of contents/container to	Explosives (chapter 2.1)	Unstable explosives and Divisions 1.1, 1.2, 1.3, 1.4, 1.5	in accordance with local/regional/national/international regulation (to be specified).
		Flammable liquids (chapter 2.6)	1, 2, 3, 4	
		Self-reactive substances and mixtures (chapter 2.8)	Types A, B, C, D, E, F	
		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, 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	
		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	

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Code	Disposal precautionary statements	Hazard class	Hazard category	Conditions for use
(1)	(2)	(3)	(4)	(5)
P501 (cont'd)	Dispose of contents/container to (cont'd)	Specific target organ toxicity, single exposure; respiratory tract irritation (chapter 3.8)	3	
		Specific target organ toxicity, single exposure; narcotic effects (chapter 3.8)	3	
		Specific target organ toxicity, repeated exposure (chapter 3.9)	1, 2	
		Aspiration hazard (chapter 3.10)	1, 2	
		Hazardous to the aquatic environment, acute hazard (chapter 4.1)	1, 2, 3	
		Hazardous to the aquatic environment, long-term hazard (chapter 4.1)	1, 2, 3, 4	
P502	Refer to manufacturer/supplier for information on recovery/recycling	Hazardous to the ozone layer (chapter 4.2)	1	

3. Amend the table in A3.3.5.1 of part 3 of Annex 3 of GHS as follows:

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. P281 Use personal protective equipment as required. P280 Wear protective gloves/protective clothing/eye protection/face protection. Manufacturer/supplier or the competent authority to specify type of equipment	P372 Explosion risk in case of fire. P373 DO NOT fight fire when fire reaches explosives. P380 Evacuate area.	P401 Storein accordance with local/regional/ national/international regulations (to be specified).	Dispose of contents/container toin accordance with local/regional/ national/international regulations (to be specified).		

Symbol Exploding bomb



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

Precautionary statements			
Prevention	Response	Storage	Disposal
Prevention P210 Keep away from heat/sparks/open flames/hot surfaces No smoking. Manufacturer/supplier or the competent authority to specify applicable ignition source(s). P230 Keep wetted with 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). P240 Ground/bond container and receiving equipment. - if the explosive is electrostatically sensitive. P250 Do not subject to grinding/shock//friction. Manufacturer/supplier or the competent authority to specify applicable rough handling. P280 Wear face protection. Manufacturer/supplier or the competent authority to specify type of equipment.	P370 +P380 In case of fire: evacuate area. P372 Explosion risk in case of fire. P373 DO NOT fight fire when fire reaches explosives.	P401 Storein accordance with local/regional/national/international regulations (to be specified).	P501 Dispose of contents/container to in accordance with local/regional/national/internation al regulations (to be specified).

Symbol Exploding bomb

Hazard category Signal word Hazard statement

Division 1.4 Warning H204 Fire or projection hazard



	Precautionary statements				
Prevention	Response	Storage	Disposal		
P210	P370+P380	P401	P501		
Keep away from heat/sparks/open flames/hot surfaces No smoking. Manufacturer/supplier or the competent authority to specify applicable ignition source(s). P240 Ground/bond container and receiving equipment. - if the explosive is electrostatically sensitive. P250 Do not subject to grinding/shock//friction. Manufacturer/supplier or the competent authority to specify applicable rough handling. P280 Wear face protection. Manufacturer/supplier or competent	In case of fire: Evacuate area. 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.	Storein accordance with local/regional/ national/international regulations (to be specified).	Dispose of contents/container to in accordance with local/regional/national/internation al regulations (to be specified).		

Symbol No symbol

Hazard category Signal word Hazard statement

Division 1.5 Danger H205 May mass explode in fire

Prevention	Precautionary state Response	Storage	Disposal
	•		_
P210	P370 + P380	P401	P501
Keep away from heat/sparks/open flames/hot surfaces No smoking.	In case of fire: Evacuate area.	Storein accordance with	Dispose of contents/container to
Manufacturer/supplier or the competent	P372	local/regional/	in accordance with
authority to specify applicable ignition	Explosion risk in case of fire.	national/international	local/regional/
source(s).	P373	regulations (to be specified).	national/international regulations
P230	DO NOT fight fire when fire	regulations (to be specified).	(to be specified).
Keep wetted with	reaches explosives.		(to be specifica).
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).			
P240			
Ground/bond container and receiving			
equipment			
- if the explosive is electrostatically sensitive.			
P250			
Do not subject to grinding/shock//friction.			
Manufacturer/supplier or the competent			
authority to specify applicable rough handling.			
P280			
Wear face protection.			
Manufacturer/supplier or competent authority to			
specify type of equipment.			

FLAMMABLE GASES (Chapter 2.2)

Symbol Flame

Hazard category Signal word Hazard statement

Danger H220 Extremely flammable gas



Precautionary statements				
Prevention	Response	Storage	Disposal	
P210 Keep away from heat/sparks/open flames/hot surfacesNo smoking. Manufacturer/supplier or competent authority to specify applicable ignition	P377 Leaking gas fire: Do not extinguish, unless leak can be stopped safely. P381	Source and Home Home Parison		
source(s).	Eliminate all ignition sources if safe to do so.			

FLAMMABLE GASES (Chapter 2.2)

Symbol No symbol

Hazard categorySignal wordHazard statement2WarningH221Flammable gas

Precautionary statements				
Prevention	Response	Storage	Disposal	
P210 Keep away from heat/sparks/open flames/hot surfacesNo smoking. Manufacturer/supplier or the competent authority to specify applicable ignition sources(s).	P377 Leaking gas fire: Do not extinguish, unless leak can be stopped safely. P381 Eliminate all ignition sources if safe to do so.	P403 Store in well-ventilated place.		

FLAMMABLE AEROSOLS

(**Chapter 2.3**)

Symbol Flame

Hazard category Signal word Hazard statement

Danger H222 Extremely flammable aerosol

Warning H223 Flammable aerosol



	Precautionary statements				
Prevention	Response	Storage	Disposal		
P210 Keep away from heat/sparks/open flames/hot surfacesNo smoking. Manufacturer/supplier or the competent authority to specify applicable ignition sources(s).		P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.			
P211 Do not spray on an open flame or other ignition source. P251 Pressurized container: 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



torage Disposa ventilated place.	1
ventilated place.	

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.	

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/face shield/eye protection.	P336 Thaw frosted parts with lukewarm water. Do not rub affected area. 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
Reep away from heat/sparks/open flames/hot surfaces.— No smoking. Manufacturer/supplier or the competent authority to specify applicable ignition source(s). P233 Keep container tightly closed. P240 Ground/Bond container and receiving equipment - if electrostatically sensitive material is for reloading. - if product is volatile so as to generate hazardous atmosphere. P241 Use explosion-proof electrical/ventilating/lighting//equipment. Manufacturer/supplier or the competent authority to specify other equipment. P242 Use only non-sparking tools. P243 Take precautionary measures against static discharge. P280 Wear protective gloves/eye protection/face protection Manufacturer/supplier or the competent authority to specify type of equipment.	P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. P370 + P378 In case of fire: Use for extinction Manufacturer/supplier or the competent authority to specify appropriate media if water increases risk.	P403 + P235 Store in a well- ventilated place. Keep cool.	P501 Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified).

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FLAMMABLE LIQUIDS (Chapter 2.6)

Symbol No symbol

Hazard category Signal word Hazard statement

Warning H227 Combustible liquid

Precautionary statements			
Prevention	Response	Storage	Disposal
P210 Keep away from flames and hot surfaces. – No smoking. P280 Wear protective gloves/eye protection/face protection Manufacturer/supplier or the competent authority to specify type of equipment.	P370 + P378 In case of fire: Use for extinction Manufacturer/supplier or the competent authority to specify appropriate media if water increases risk.	P403 + P235 Store in a well-ventilated place. Keep cool.	P501 Dispose of contents/container to in accordance with local/regional/ national/international regulations (to be specified).

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	P370 + P378		
Keep away from heat/sparks/open	In case of fire: Use for extinction		
flames/hot surfaces No smoking.	Manufacturer/supplier or the		
Manufacturer/supplier or the competent	competent authority to specify		
authority to specify applicable ignition	appropriate media.		
source(s).	- if water increases risk.		
P240			
Ground/Bond container and receiving			
equipment.			
- if 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.			
P280			
Wear protective gloves/eye			
protection/face protection			
Manufacturer/supplier or the competent			
authority to specify 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	
P210 Keep away from heat/sparks/open flames/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. P280 Wear protective gloves/eye protection/face protection. Manufacturer/supplier or the competent authority to specify type of equipment.	P370 + P378 In case of fire: Use for extinction 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.	P403 + P235 Store in a well-ventilated place. Keep cool. P411 Store at temperatures not exceeding °C/ °F Manufacturer/supplier or the competent authority to specify temperature. P420 Store away from other materials.	P501 Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified).	

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





	Precautionary statements			
Prevention	Response	Storage	Disposal	
P210 Keep away from heat/sparks/open flames/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. P280 Wear protective gloves/eye protection/face protection. Manufacturer/supplier or the competent authority to specify type of equipment.	P370 + P378 In case of fire: Use for extinction 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.	P403 + P235 Store in a well-ventilated place. Keep cool. P411 Store at temperatures not exceeding °C/ °F Manufacturer/supplier or the competent authority to specify temperature. P420 Store away from other materials.	P501 Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified).	

SELF-REACTIVE SUBSTANCES AND MIXTURES (Chapter 2.8)

Symbol	
Flame	

Hazard category	Signal word	Hazard	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/sparks/open flames/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 container. P280 Wear protective gloves/eye protection/face protection. Manufacturer/supplier or the competent authority to specify type of equipment.	P370 + P378 In case of fire: Use for extinction Manufacturer/supplier or the competent authority to specify appropriate media if water increases risk.	P403 + P235 Store in a well-ventilated place. Keep cool. P411 Store at temperatures not exceeding °C/ °FManufacturer/supplier or the competent authority to specify temperature. P420 Store away from other materials.	P501 Dispose of contents/container toin accordance with local/regional/national/international regulations (to be specified).	

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/sparks/open flames/hot surfaces No smoking. Manufacturer/supplier or the competent authority to specify applicable ignition sources(s). P222 Do not allow contact with air. P280 Wear protective gloves/eye protection/face protection. Manufacturer/supplier or the competent authority to specify type of equipment.	P302 + P334 IF ON SKIN: Immerse in cool water/wrap with wet bandages P370 + P378 In case of fire: Use for extinction Manufacturer/supplier or the competent authority to specify appropriate media if water increases risk.	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

Danger H250 Catches fire spontaneously if exposed to air



Precautionary statements				
Prevention	Response	Storage	Disposal	
P210 Keep away from heat/sparks/open flames/hot surfaces No smoking. Manufacturer/supplier or the competent authority to specify applicable ignition source(s). P222 Do not allow contact with air. P280 Wear protective gloves/eye protection/face protection Manufacturer/supplier or the competent authority to specify type of equipment.	P335 + P334 Brush off loose particles from skin. Immerse in cool water/wrap in wet bandages. P370 + P378 In case of fire: Use for extinction Manufacturer/supplier or the competent authority to specify appropriate media if water increases risk.	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	
P235 + P410 Keep cool. Protect from sunlight. P280 Wear protective gloves/eye protection/face protection. Manufacturer/supplier or the competent authority to specify type of equipment.		P407 Maintain air gap between stacks/pallets. 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. P420 Store away from other materials.		

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

Symbol Flame

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



Precautionary statements			
Prevention	Response	Storage	Disposal
P223 Keep away from any possible contact with water, because of violent reaction and possible flash fire.	P335 + P334 Brush off loose particles from skin and immerse in cool water/wrap in wet bandages.	P402 + P404 Store in a dry place. Store in a closed container.	P501 Dispose of contents/container toin accordance with
P231 + P232 Handle under inert gas. Protect from moisture. P280 Wear protective gloves/eye protection/face protection. Manufacturer/supplier or the competent authority to specify type of equipment.	P370 + P378 In case of fire: Use for extinction Manufacturer/supplier or the competent authority to specify appropriate media if water increases risk.		local/regional/national/ international regulations (to be specified).

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 under inert gas. Protect from moisture. P280 Wear protective gloves/eye protection/face protection. Manufacturer/supplier or the competent authority to specify type of equipment.	P370 + P378 In case of fire: Use for extinction Manufacturer/supplier or the competent authority to specify appropriate media if water increases risk.	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).	

OXIDIZING LIQUIDS (Chapter 2.13)

Symbol Flame over circle

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. 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. Manufacturer/supplier or the competent authority to specify type of equipment. P283 Wear fire/flame resistant/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 for extinction Manufacturer/supplier or the competent authority to specify appropriate media. - if water increases risk.		Dispose of contents/container toin accordance with local/regional/ national/international regulations (to be specified).

OXIDIZING LIQUIDS (Chapter 2.13)

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. P220 Keep/Store away from clothing//combustible materialsManufacturer/supplier or the competent authority to specify other incompatible materials. P221 Take any precaution to avoid mixing	P370 + P378 In case of fire: Use for extinction Manufacturer/supplier or the competent authority to specify appropriate media if water increases risk.		P501 Dispose of contents/container to in accordance with local/regional/ national/international regulations (to be specified).
with combustibles/ Manufacturer/supplier or the competent authority to specify other incompatible materials. P280 Wear protective gloves/eye protection/face protection. Manufacturer/supplier or the competent authority to specify type of equipment.			

OXIDIZING SOLIDS (Chapter 2.14)

Symbol Flame over circle

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. 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. Manufacturer/supplier or the competent authority to specify type of equipment. P283 Wear fire/flame resistant/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 for extinction Manufacturer/supplier or the competent authority to specify appropriate media. - if water increases risk.		P501 Dispose of contents/container to in accordance with local/regional/ national/international regulations (to be specified).

OXIDIZING SOLIDS (Chapter 2.14)

Symbol Flame over circle



Hazard category Signal word Hazard statement

Danger H272 May intensify fire; oxidizer

Warning H272 May intensify fire; oxidizer

Precautionary statements			
Prevention	Response	Storage	Disposal
P210 Keep away from heat. P220 Keep/Store away from clothing// 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. P280 Wear protective gloves/eye protection/face protection. Manufacturer/supplier or the competent authority to specify type of equipment.	P370 + P378 In case of fire: Use for extinction Manufacturer/supplier or the competent authority to specify appropriate media if water increases risk.		P501 Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified).

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	
Reep away from heat/sparks/open flames/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 container. P280 Wear protective gloves/eye protection/face protection. Manufacturer/supplier or the competent authority to specify type of equipment.		P411 + P235 Store at temperatures not exceeding°C/°F. Keep cool Manufacturer/supplier or the competent authority to specify temperature. P410 Protect from sunlight. P420 Store away from other materials.	Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified).	

ORGANIC PEROXIDES (Chapter 2.15)

Symbol Exploding bomb and flame

Hazard category Signal word Hazard statement

Type B Danger H241 Heating may cause a fire or explosion





Precautionary statements			
Prevention	Response	Storage	Disposal
P210 Keep away from heat/sparks/open flames/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 container.		P411 + P235 Store at temperatures not exceeding °C/ °F. Keep cool. Manufacturer/supplier or the competent authority to specify temperature. P410 Protect from sunlight. P420 Store away from other materials.	P501 Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified).
P280 Wear protective gloves/eye protection/face protection. Manufacturer/supplier or the competent authority to specify 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



Precautionary statements						
Prevention Response Storage Disposal						
P210 Keep away from heat/sparks/open flames/hot surfaces No smoking. Manufacturer/supplier or the competent authority to specify applicable ignition source(s).		P411 + P235 Store at temperatures not exceeding°C/°F. Keep cool Manufacturer/supplier or the competent authority to specify temperature.	P501 Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified).			
P220 Keep/Store away from clothing// combustible materials Manufacturer/supplier or the competent authority to specify incompatible materials.		P410 Protect from sunlight. P420 Store away from other materials.				
P234 Keep only in original container.						
P280 Wear protective gloves/eye protection/face protection. Manufacturer/supplier or the competent authority to specify 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 container.	P390 Absorb spillage to prevent material damage.	P406 Store in corrosive resistant/ container with a resistant inner liner Manufacturer/supplier or the competent authority to specify other compatible materials.		

Symbol Skull and crossbones

Hazard category	Signal word	Hazard s	Hazard statement		
1	Danger	H300	Fatal if swallowed		
2	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-or/ doctor/physician/ Manufacturer/supplier or the competent authority to specify the appropriate source of emergency medical advice. P321 Specific treatment (see on this label) Reference to supplemental first aid instruction. - if immediate administration of antidote is required. P330 Rinse mouth.	P405 Store locked up.	P501 Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified).	

Symbol Skull and crossbones

Hazard category Signal word Hazard statement

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-or/ doctor/physician/ Manufacturer/supplier or the competent authority to specify the appropriate source of emergency medical advice. P321 Specific treatment (see on this label) Reference to supplemental first aid instruction. - if immediate administration of antidote is required. P330 Rinse mouth.	P405 Store locked up.	P501 Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified).	

Symbol Exclamation mark

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 or/ doctor/physician/ if you feel unwell. Manufacturer/supplier or the competent authority to specify the appropriate source of emergency medical advice. P330 Rinse mouth.		P501 Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified).	

Symbol No symbol

Hazard category Signal word Hazard statement

5 Warning H303 May be harmful if swallowed

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

Symbol Skull and crossbones

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

2





Precautionary statements				
Prevention	Response	Storage	Disposal	
P262 Do not get in eyes, on skin, or on clothing. P264 Wash thoroughly after handling Manufacturer/supplier or the competent authority to specify parts of the body to be washed after handling. P270 Do not eat, drink or smoke when using this product. P280 Wear protective gloves/protective clothing. Manufacturer/supplier or the competent authority to specify type of equipment.	P302 + P350 P352 IF ON SKIN: Gently wash with plenty of soap and water/ Manufacturer/supplier or the competent authority may specify a cleansing agent if appropriate, or may recommend an alternative agent in exceptional cases if water is clearly inappropriate P310 Immediately call a POISON CENTER or/doctor/physician/ Manufacturer/supplier or the competent authority to specify the appropriate source of emergency medical advice. P322 P321 Specific measures treatment (see on this label) Reference to supplemental first aid instruction. - if immediate measures such as specific cleansing agent is advised. P361 + P364 Remove/Take off immediately all contaminated clothing and wash it before reuse. P363 Wash contaminated clothing before reuse.	P405 Store locked up.	Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified).	

Symbol Skull and crossbones

Hazard category Signal word Hazard statement

Danger H311 Toxic in contact with skin



Precautionary statements				
Prevention	Response	Storage	Disposal	
Wear protective gloves/protective clothing. Manufacturer/supplier or the competent authority to specify type of equipment.	P302 + P350 P352 IF ON SKIN: Gently wash with plenty of soap and 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 or/ doctor/physician/ if you feel unwell. Manufacturer/supplier or the competent authority to specify the appropriate source of emergency medical advice. P322 P321 Specific measures treatment (see on this label) Reference to supplemental first aid instruction. - if measures such as specific cleansing agent is advised. P361 + P364 Remove/Take off immediately all contaminated clothing and wash it before reuse. P363 Wash contaminated clothing before reuse.	P405 Store locked up.	Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified).	

Symbol Exclamation mark

Hazard category Signal word Hazard statement

Warning H312 Harmful in contact with skin



Precautionary statements			
Prevention	Response	Storage	Disposal
P280 Wear protective gloves/protective clothing Manufacturer/supplier or the competent authority to specify type of equipment.	P302 + P350 P352 IF ON SKIN: Gently wash with plenty of soap and 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 or/ doctor/physician/ if you feel unwell. Manufacturer/supplier or the competent authority to specify the appropriate source of emergency medical advice. P322 P321 Specific measures treatment (see on this label) Reference to supplemental first aid instruction. - if measures such as specific cleansing agent is advised. P363 Wash contaminated clothing before reuse. 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).

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 or/ doctor/physician/ if you feel unwell. Manufacturer/supplier or the competent authority to specify the appropriate source of emergency medical advice.		

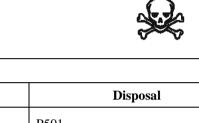
ACUTE TOXICITY - INHALATION (Chapter 3.1)

Symbol Skull and crossbones

Hazard category	Signal word	Hazard statement
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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. Manufacturer/supplier or the competent authority to specify equipment text in square brackets may be used where additional safety information regarding adequate ventilation is provided	P304 + P340 IF INHALED: Remove victim person to fresh air and keep at rest in a position ensure comfortable for breathing. P310 Immediately call a POISON CENTER or/doctor/physician/ Manufacturer/supplier or the competent authority to specify the appropriate source of emergency medical advice. P320 Specific treatment is urgent (see on this label) Reference to supplemental first aid instruction if immediate administration of antidote is required.	P403 + P233 Store in a well-ventilated place. Keep container tightly closed. - if product is volatile 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).

ACUTE TOXICITY - INHALATION (Chapter 3.1)

Symbol
Skull and crossbones

Hazard category Signal word Hazard statement

Danger H331 Toxic if inhaled



Precautionary statements				
Prevention	Response	Storage	Disposal	
P261 Avoid breathing dust/fume/gas/mist/vapours/spray. Manufacturer/supplier or the competent authority to specify applicable conditions. -may be omitted if P260 is given on label P271 Use only outdoors or in a well-ventilated area.	P304 + P340 IF INHALED: Remove victim person to fresh air and keep at rest in a position ensure comfortable for breathing. P311 Call a POISON CENTER or/ doctor/physician/ Manufacturer/supplier or the competent authority to specify the appropriate source of emergency medical advice. P321 Specific treatment (see on this label) Reference to supplemental first aid instruction. - if immediate specific measures are required.	P403 + P233 Store in a well-ventilated place. Keep container tightly closed 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).	

ACUTE TOXICITY - INHALATION (Chapter 3.1)

Symbol Exclamation mark

Hazard category Signal word Hazard statement

Warning H332 Harmful if inhaled



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

SKIN CORROSION/IRRITATION

(Chapter 3.2)

Symbol Corrosion

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 type of equipment.	P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. P363 Wash contaminated clothing before reuse. P304 + P340 IF INHALED: Remove victim person to fresh air and keep at rest in a position ensure comfortable for breathing. P310 Immediately call a POISON CENTER or/doctor/physician/ Manufacturer/supplier or the competent authority to specify the appropriate source of emergency medical advice. P321 Specific treatment (see on this label) Reference to supplemental first aid instruction Manufacturer/supplier or the competent authority may specify a cleansing agent if appropriate. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.	P405 Store locked up.	P501 Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified).

SKIN CORROSION/IRRITATION (Chapter 3.2)

Symbol Exclamation mark

Hazard category Signal word Hazard statement

Warning H315 Causes skin irritation



Precautionary statements			
Prevention	Response	Storage	Disposal
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 type of equipment.	P302 + P350 P352 IF ON SKIN: Wash with plenty of soap and water/ Manufacturer/supplier or the competent authority may specify a cleansing agent if appropriate, or may recommend an alternative agent in exceptional cases if water is clearly inappropriate P321 Specific treatment (see on this label) Reference to supplemental first aid instruction. - Manufacturer/supplier or the competent authority may specify a cleansing agent if appropriate. P332 + P313 If skin irritation occurs: Get medical advice/attention. P362 + P364 Take off contaminated clothing and wash before reuse 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.		

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 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 or/ doctor/physician/ 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.	P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.		
P280 Wear eye protection/face protection. Manufacturer/supplier or the competent authority to specify type of equipment.	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. Manufacturer/supplier or the competent authority to specify applicable conditions. - may be omitted if P260 is given on label P285-P284 [In case of inadequate ventilation] wear respiratory protection. Manufacturer/supplier or the competent authority to specify equipment - text in square brackets may be used where additional safety information regarding adequate ventilation is provided	P304 + P341-P340 IF INHALED: If breathing is difficult, Rremove victim person to fresh air and keep at rest in a position ensure comfortable for breathing. P342 + P311 If experiencing respiratory symptoms: Call a POISON CENTER or/ doctor/physician/ Manufacturer/supplier or the competent authority to specify the appropriate source of emergency medical advice.		Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified).

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. Manufacturer/supplier or the competent authority to specify applicable conditions. -may be omitted if P260 is given on label P272 Contaminated work clothing should not be allowed out of the workplace. P280 Wear protective gloves. Manufacturer/supplier or the competent authority to specify type of equipment.	P302 + P350 P352 IF ON SKIN: Gently wash with plenty of soap and 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) Reference to supplemental first aid instruction. - Manufacturer/supplier or the competent authority may specify a cleansing agent if appropriate. P362 + P364 Take off contaminated clothing and wash it before reuse. P363 Wash contaminated clothing before reuse.		Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified).		

GERM CELL MUTAGENICITY (Chapter 3.5)

Symbol Health hazard

Hazard category	Signal word	Hazard statement
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Danger H340 May cause genetic defects <...>

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. P281 Use personal protective equipment as required. P280 Wear protective gloves/protective clothing/eye protection/face protection. Manufacturer/supplier or the competent authority to specify 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).			

CARCINOGENICITY (Chapter 3.6)

Symbol Health hazard

Hazard category	Signal word	Hazard 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. P281 Use personal protective equipment as required. P280 Wear protective gloves/protective clothing/eye protection/face protection. Manufacturer/supplier or the competent authority to specify 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).				

TOXIC TO REPRODUCTION

(**Chapter 3.7**)

Symbol Health hazard

Hazard category	Signal word	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	P308 + P313	P405	P501			
Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. P281	IF exposed or concerned: Get medical advice/attention.	Store locked up.	Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified).			
Use personal protective equipment as required. P280						
Wear protective gloves/protective clothing/eye protection/face protection. Manufacturer/supplier or the competent authority to specify type of equipment						

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/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	
1	Danger	H370 Causes damage to organs <> <<>>	
		<> (or state all organs affected if known)	
		<<>> (state route of exposure if it is conclusively proven that no oth 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.	P307P308 + P311 IF exposed or concerned: Call a POISON CENTER or/ doctor/physician/ Manufacturer/supplier or the competent authority to specify the appropriate source of emergency medical advice. P321 Specific treatment (see on this label) Reference to supplemental first aid instruction. - if immediate measures are required.	P405 Store locked up.	Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified).		

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.	P309P308 + P311 IF exposed or concerned or if you feel unwell: Call a POISON CENTER or/ doctor/physician/ Manufacturer/supplier or the competent authority to specify the appropriate source of emergency medical advice.	P405 Store locked up.	P501 Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified).		
P270 Do not eat, drink or smoke when using this product.					

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. Manufacturer/supplier or the competent authority to specify applicable conditions. -may be omitted if P260 is given on label P271 Use only outdoors or in a well-ventilated area.	P304 + P340 IF INHALED: Remove victim person to fresh air and keep at rest in a position ensure comfortable for breathing. P312 Call a POISON CENTER or/doctor/physician/ 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 product is volatile so as to generate hazardous atmosphere. P405 Store locked up.	P501 Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified).

SPECIFIC TARGET ORGAN TOXICITY (Repeated exposure) (Chapter 3.9)

Symbol Health hazard

Hazard category	Signal word	Hazar	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.	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).
P270 Do not eat, drink or smoke when using this product.			

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).

ASPIRATION HAZARD (Chapter 3.10)

Symbol Health hazard

Hazard category	Signal word	Hazard statement

Danger H304 May be fatal if swallowed and enters airways

Warning H305 May be harmful if swallowed and enters airways



Precautionary statements			
Prevention	Response	Storage	Disposal
	P301 + P310 IF SWALLOWED: Call a POISON CENTER or/ doctor/physician/ 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).

HAZARDOUS TO THE AQUATIC ENVIRONMENT - ACUTE HAZARD (Chapter 4.1)

Symbol Environment

Hazard category Signal word Hazard statement

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).

HAZARDOUS TO THE AQUATIC ENVIRONMENT - ACUTE HAZARD (Chapter 4.1)

Symbol 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 Avoid release to the environment if this is not the intended use.			P501 Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified).

HAZARDOUS TO THE AQUATIC ENVIRONMENT - LONG-TERM HAZARD (**Chapter 4.1**)

Symbol Environment

Hazard category	Signal word	Hazard statement

Warning Very toxic to aquatic life with long lasting effects H410

Toxic to aquatic life with long lasting effects 2 No signal word H411



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/internatio nal regulations (to be specified).		

HAZARDOUS TO THE AQUATIC ENVIRONMENT - LONG-TERM HAZARD (Chapter 4.1)

Symbol *No symbol*

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

Precautionary statements					
Prevention	Response	Storage	Disposal		
P273 Avoid release to the environment if this is not the intended use.			P501 Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified).		

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/supplier for information on recovery/recycling		
