## UN/SCEGHS/17/INF.14

# 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

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## UPDATING OF THE GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION AND LABELLING OF CHEMICALS

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

#### Introduction

1. At its sixteenth session (December 2008), the Subcommittee approved the continuing work plan for the informal correspondence group (CG) 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. This information document aims to make progress within workstream 1 by presenting a number of suggestions to edit and rationalise the current list of GHS precautionary statements (PS).
- 3. The paper also sets out proposals for some changes to the PS for physical hazards which have been put forward by CEFIC. The two sets of suggested changes are presented together with a view to ensuring that the overall set of amendments agreed to the PS are consistent and complementary.
- 4. An earlier version of these proposals (not including the CEFIC proposals) was presented to the Subcommittee in information document UN/SCEGHS/15/INF.26. The proposals have since been discussed within the informal CG by email and at the break-out meetings of the group at the 15<sup>th</sup> and 16<sup>th</sup> sessions. Most recently comments have been received from the CG on a draft of this document circulated in May 2009, which included the CEFIC proposals. The present document has been revised to take into account the comments and feedback received during these discussions, however the proposals remain in

development and are subject to further discussion and agreement within the informal CG prior to submission of a formal proposal. The purpose of this information document is therefore to give an update to the Subcommittee on the work being carried out by the CG and, acknowledging the limited time for scrutiny before the plenary meeting of the Subcommittee, to seek its feedback on the proposals in their current form.

5. Subject to the subcommittee's views, the informal CG will continue work on the proposals with a view to submitting a working document for the December 2009 meeting.

#### Proposals for rationalisation of GHS precautionary statements

- 6. Presently there are a number of factors limiting the usability of the GHS PS:
  - (a) A high number of PS 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 PS by manufacturers and suppliers can be difficult when a large number are triggered.
  - (c) Different hazard classifications trigger similar but different PS, leading to arguably unnecessary small differences between precautionary measures recommended in different circumstances.
- 7. Given the number and relatively unstructured nature of the existing PS, there is substantial scope for reducing both the overall number of PS and the amount of precautionary "wordage" that must appear on labels, without reducing the essential precautionary information given on labels.
- 8. This paper includes proposals which aim to achieve this through making editorial amendments to the current list of PS. Proposals are also included to rephrase statements where they are currently unclear or confusing.

#### Example 1

9. Currently there are a few cases where very similar precautionary statements are given within the Prevention and Storage categories. For example, the following statements appear:

P220 Keep/store away from clothing/.../combustible materials P420 Store aware from other materials

- 10. The precautionary behaviour prescribed by these two statements is essentially the same (to keep the chemical in question away from various other materials). Therefore, the statements could be replaced with one single statement without loss of protection:
  - P220 Keep/Store away from clothing/.../combustible materials/other materials
- 11. This statement gives the manufacturer/supplier or competent authority the flexibility to specify, as appropriate, the materials that the chemical needs to be kept away from.
- 12. It is also proposed to include some additional guidance in the 'conditions for use' column to clarify the use of the words 'keep' and 'store'. It is suggested that 'keep' should be used when the

chemical should be kept away from the specified materials at all times, whereas 'store' should be used only when this precaution applies to storage.

#### Example 2

13. Currently the Prevention category contains the following two statements:

P280 Wear protective gloves/protective clothing/eye protection/face protection. P281 Use personal protective equipment as required

- 14. P280 applies to several hazard categories, and for each of these guidance is given in the 'conditions for use' column as to which specific type of equipment should be specified by the manufacturer/supplier or competent authority (e.g. 'specify face protection' for Explosives, divisions 1.1-1.5). No further guidance is given for application of P281, which applies to unstable explosives and CMR categories 1A, 1B and 2.
- 15. Given the similarity between these statements, rationalisation could be achieved by replacing them with a single statement:

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

16. Where specific guidance is currently given as to the type of equipment to be specified in P280 this should be retained in its current form for the relevant hazard categories. In the case of the categories to which P281 applies, it is proposed that the general direction 'manufacturer/supplier or the competent authority to specify type of equipment' should be added to retain the current flexibility of this statement. Adding the ellipsis '...' to this statement would also indicate that further types of personal protective equipment may be required for these hazard categories other than those specifically mentioned.

#### Example 3

17. The current list of PS includes six statements recommending that a user seek medical attention in different circumstances:

	<b>Current precautionary statements</b>		Suggested precautionary statements
P310	Immediately call a POISON CENTER or	P310*	Immediately call a POISON CENTER/
	doctor/physician		or-doctor/physician/
P311	Call a POISON CENTER or	P311*	Call a POISON CENTER <u>/</u> -or
	doctor/physician		doctor/physician/
P312	Call a POISON CENTER or	P312*	Call a POISON CENTER/—or
	doctor/physician if you feel unwell		doctor/physician/ if you feel unwell
P313	Get medical advice/attention		
P314	Get medical advice/attention if you feel unwell		
P315	Get immediate medical advice/attention		

18. Although phrased slightly differently, the basic advice being given here – to seek medical attention from an appropriate source – is the same in relation to P310-P312 and P313-P315, with differences within these two groups of statements indicating different degrees of urgency. This suggests that a single set of three statements could be used instead of the current six.

- 19. It is also necessary to take into account that the appropriate source of 'front line' medical advice will differ in different jurisdictions. In some regions and countries Poison Centers or Poison Control Centers will be the appropriate first point of contact for workers or consumers, whereas in others Poison Centers only provide advice to medical professionals, and consumers and workers should seek advice from a different source. Therefore, while there is scope for reducing the number of PS of this type, adequate flexibility is needed to take into account different arrangements for seeking medical advice or attention which may be in place.
- 20. It is therefore suggested that three statements, P310\*-P312\* are used as listed in the right hand column above. These statements would apply to all the categories to which P310-P312 and P313-P315 currently apply P310\* would take over the hazard categories to which P310 and P313 currently applies, and so on. They would also replace P310-P312 and P313-P315 in combined PS, as appropriate. Use of the slash '/' indicates that the manufacturer/supplier or competent authority should specify the appropriate source of first line medical advice, depending on the nature of the hazard and the way that the relevant services are organised locally.
- 21. It is also suggested that text be placed in the column (5) where these statements apply stating that 'manufacturer/supplier or the competent authority to specify the appropriate source of medical advice'.
- 22. However it is recognised that in some cases more than one possible source of medical attention may be appropriate in relation to a single product or chemical. In this case, the generic statement 'Get medical advice/attention' or 'get immediate medical advice/attention' may be appropriate. These statements are therefore mentioned as options in the 'conditions for use' column.
- 23. The advantages of this rationalisation would be three-fold: first to reduce the overall number of PS; second, to avoid any confusion which could arise from differences in instructions about the type of medical attention to be obtained in different situations; and third to give flexibility for statements which reflect the arrangements in any country or region to be selected as appropriate.

#### **Amendments to physical precautionary statements**

24. In addition some amendments are proposed to the precautionary statements for physical hazards with a view to rationalising and clarifying the conditions of application for these statements.

#### Organic Peroxides and Self-reactive substances

- 25. The hazardous properties of organic peroxides and self-reactive substances are more or less the same. In GHS the classification principles, classification flow-chart and tests to be executed are also identical as well as the breakdown of Types A-G. Furthermore, types A-G of organic peroxides and self-reactive substances have the same hazardous properties description. Therefore it is proposed to harmonise the precautionary statements for these two hazard classes.
- 26. To achieve this it is proposed to apply the following additional precautionary statements to Organic peroxides:

P370 + P380 + P375: In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion. (types A and B only)

P403: Store in a well-ventilated place. (types A, B, C, D, E, F)

27. The following precautionary statement would also apply in addition to Self-reactive substances and mixtures (Types A, B, C, D, E, F).

#### P410: **Protect from sunlight**

28. Finally, the statement P370 + P378: **In case of fire: Use ... for extinction**, has been removed from the precautionary statements for self-reactive substances together with the note, "Manufacturer /supplier of the competent authority to specify appropriate media. – *if water increases risk*'. This is because water can always be used for extinction with chemicals within these hazard classes since in no case do they react with water. Moreover, water would in all cases be the recommended means to extinguish such fires because of its cooling capacity and ability to significantly reduce the effect of the decomposition of the materials.

#### Gases under pressure

- 29. Precautionary statement P410, "Protect from sunlight" is currently assigned to compressed gases, liquefied gases and dissolved gases within hazard class 2.5.
- 30. The risk of increasing the internal pressure of a gas receptacle up to its test pressure or of having it liquid full because of its exposure to sunshine does not exist at certain latitudes but may exist at others. This requirement may be completely irrelevant in northern countries but could make sense in certain southern countries.
- 31. Therefore it is proposed to add the following note under 'conditions of use' for this statement: "-To be used in countries where the likelihood exists for the content of the receptacle to exceed 60°C if the receptacle is not protected from sunshine."
- 32. The criterion of  $60^{\circ}$ C is taken from the criteria to determine the maximum filling ratio for liquefied gases in P200 (3)(c) of the UNRTDG (the Orange Book): ".....in addition the liquid phase shall not fill the pressure receptacles at any temperature up to  $60^{\circ}$ C." This criterion gives a safety margin versus the other criteria of P200 that limits the internal pressure at  $65^{\circ}$ C below the test pressure of the receptacle.

#### Flammable liquids/gases, explosives, organic peroxides

- 33. Amendments as shown in Annex 2 are proposed for the following reasons:
- 34. In some cases the list of hazard classes or categories to which a precautionary statement has to be applied was incomplete (e.g. explosives are not mentioned for P234 "Keep only in original container" although their classification is linked to a certain packaging through the division assignment procedure).
- 35. In some cases conditions for use are added or further refined, respectively.

#### **Numbering issues**

- 36. In light of the proposed changes to PS, a decision is needed on how the alphanumeric coding of PS should be adapted to take these into account. Three options for this have been considered:
  - **Option 1:** Re-order numbering after changes so that the numbering remains sequential within each group of PS (groups being P20X, P21X, etc.). For example, if P307 is deleted as suggested above, the current P308 (**IF exposed or concerned:**) would be renumbered P307, and the current P309 (**IF exposed or if you feel unwell:**) would be renumbered P308. Aside from this, edited PS retain their existing numbering.
  - **Option 2:** Edited PS retain their existing numbering, and other statements retain the same numbering as they currently have where possible. However, entirely new PS would be given a new number.

**Option 3:** Unchanged PS retain the same numbering, but any changed statements are given a new number.

37. The advantages and disadvantages of each option are summarised below.

Option	Advantages	Disadvantages
1	There will be no gaps in numbering after the PS have been edited – numbering remains sequential within each group of PS.	Many statements may need to be given a new number to retain sequential numbering, even though they have not changed in any way.  Users may find this confusing.
2	Numbering of statements can stay in the same grouped format provided the number of new statements does not increase substantially (since little need for new numbers)	Some gaps will appear in numbering where statements have been removed.
	Statements for which there are only minor editorial changes retain the same numbers, facilitating cross-referencing between versions of the GHS.	Some statements will change in wording while retaining the same number, which could cause confusion where there is use of different editions of the GHS.
3	Statements which retain the same numbering will have exactly the same wording in different editions of the GHS.	There will now be numerous gaps in the numbering as any statement that is edited will require an entirely new number.  Continued use of the existing numbering groups may not be possible, since a large number of new numbers will be needed, especially in future if further editorial
		especially in future if further editorial amendments are made to the PS.

38. In view of the above considerations, option 2 is recommended as involving the best combination of maintaining existing numbering where possible while avoiding confusion due to the same numbers being assigned to different statements. However, the views of the subcommittee are welcomed on this issue.

#### **Summary of annexes**

- 39. A summary of the Annexes to this document is given below:
  - Annex 1 List of suggested editorial changes to precautionary statements with brief explanations
  - Annex 2 List of suggested changes to physical precautionary statements
  - Annex 3 Suggested changes to tables A3.2.1, A3.2.2, A3.2.3, A3.2.4 (markup showing changes)
  - Annex 4 'Clean' copy of tables A3.2.1, A3.2.2, A3.2.3, A3.2.4, incorporating all proposed changes
  - Annex 5 Suggested changes to the tables in A3.3.5 (marked up)

#### **Next steps**

- 40. Information document UN/SCEGHS/16/INF.24 informed the subcommittee that the informal correspondence group are considering, in addition to editorial changes to the PS, a number of further approaches to rationalising the PS in Annex 3 of the Purple Book. These include:
  - (a) Combination of precautionary statements;
  - (b) Re-grouping of precautionary statements;
  - (c) Guidance for selection of precautionary statements;
  - (d) An 'order of preference' for precautionary statements;
  - (e) Use of 'signpost' statements which refer to more detailed precautionary information located other than on the label;
- 41. Taking into account document UN/SCEGHS/16/INF.20 (Canada) the informal correspondence group informally agreed to consider the above approaches in the order listed above. Other approaches to rationalisation of the precautionary statements will also be considered as appropriate and suggestions from the subcommittee are welcomed. The informal correspondence group aims to bring forward further proposals based on these approaches at subsequent Subcommittee meetings.
- 42. It was agreed at the December 2008 meeting of the Subcommittee that the correspondence group should also take forward work on Workstream 2, to improve the presentation of Annexes 1 to 3 of the GHS, although Workstream 1 (rationalisation/reduction in redundancy of PS) should be given priority. It is therefore the intention of the correspondence group to take forward work on Workstream 2 once satisfactory progress has been made within Workstream 1.

#### **Action requested of the subcommittee**

- 43. The Subcommittee is invited to:
  - (a) Comment on the proposals to rationalise precautionary statements given in paragraphs 5. 22. and Annex 1, 3, 4 and 5;
  - (b) Comment on the proposals to rationalise and amend the physical precautionary statements given in paragraphs 23. 34. and Annex 2, 3, 4 and 5;
  - (c) Comment on the proposal for re-numbering the PS in light of the changes, given in paragraphs 35.- 37.

Annex 1: List of suggested changes to precautionary statements with brief explanations (Rationalisation)

Code	Statement	Issue	Suggested change
P101	If medical advice is needed, have product container or label at hand	None	None
P102	Keep out of reach of children	None	None
P103	Read label before use	Redundant – odd advice	Replace with: Read entire label before use
P201 P202	Obtain special instructions before use Do not handle until all safety precautions have been read and understood.	P201 not clear, and seems to be redundancy between the statements.	Replace with: Do not handle until all safety precautions have been read and understood
P210	Keep away from heat/sparks/open flames/hot surfaces. – No smoking.	None	None
P211	Do not spray on an open flame or other ignition source	None	None
P220	Keep/store away from clothing//combustible materials	Apparent redundancy, though P220 is prevention, and P420 Storage at present.	Replace by single statement: <b>Keep/Store away from clothing//other materials/combustible materials.</b> Manufacturer to
P420	Store away from other materials		specify incompatible materials and whether 'keep' or 'store'.  - 'keep' should be used when the chemical should be kept away from the specified materials at all times, whereas 'store' should be used when this precaution only applies to storage
P221	Take any precaution to avoid mixing with combustibles/	'any precaution' is not clear and seems redundant.	Replace with: <b>Do not mix with combustibles</b>
P222	Do not allow contact with air	None	None
P223	Keep away from any possible contact with water, because of violent reaction and possible flash fire	None	None
P230	Keep wetted with	None	None
P231	Handle under inert gas	None	None
P422	Store contents under	None	None
P232	Protect from moisture	None	None

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Annex 1: List of suggested changes to precautionary statements with brief explanations (Rationalisation) (cont'd)

Code	Statement	Issue	Suggested change
P233	Keep container tightly closed	Redundancy, though P233 is prevention	Delete P404 and replace with modified P233, 'Keep container-in a
P404	Store in a closed container	and P404 is storage. In some cases, (e.g. Acute toxicity, inhalation cat 1) P233 comes under storage as combination statement P403+P233	tightly closed container'. This covers relevant precaution for substances and mixtures which, in contact with water, emit hazardous gases, which is the only hazard category to which P404 applies.
P234	Keep only in original container	None	None
P235	Keep cool	None	None
P240	Ground/bond container and receiving equipment	None	None
P241	Use explosion-proof electrical/ventilating/lighting//equipme nt	Any equipment used (electrical or non- electrical) should be explosion proof, so could be shorter	Instead use 'Use explosion proof equipment'. May also specify that manufacturer/supplier or the competent authority to specify equipment.
P242	Use only non-sparking tools	None	None
P243	Take precautionary measures against static discharge	None	None
P244	Keep reduction valves free from grease and oil.	Reduction valves': it is not clear and this statement should apply to all equipment that comes into contact with oxidizing gases	Replace with: Keep cylinder valves and pressure regulators free from grease and oil.
P250	Do not subject to grinding/shock/friction	None	None
P260 P261	Do not breathe dust/fume/gas/mist/ vapours/spray Avoid breathing dust/fume/gas/mist/ vapours/spray	Redundancy – same action required. 'Do not create dust' etc. would also be more appropriate than 'do not breathe' in some situations, where this is practicable.	Delete P261 – replace with single statement, <b>Do not create/ breathe dust/fume/gas/mist/vapours/ spray.</b> Manufacturer supplier should specify practicable precaution as well as applicable conditions.
P262	Do not get in eyes, on skin, or on clothing	None	None
P263	Avoid contact during pregnancy/ while nursing	None	None
P264	Wash thoroughly after handling	None	None
P270	Do not eat/drink or smoke when using this product	None	None
P271	Use only outdoors in a well-ventilated area	None	None
P272	Contaminated work clothing should not be allowed out of the workplace.	None	None

Annex 1: List of suggested changes to precautionary statements with brief explanations (Rationalisation) (cont'd)

Code	Statement	Issue	Suggested change
P273	Avoid release to the environment	None	None
P280 P281	Wear protective gloves/protective clothing/eye protection/face protection Use personal protective equipment as required	Redundancy	Replace with one statement: <b>Wear protective gloves/protective clothing/face protection</b> Manufacturer/supplier or the competent authority to specify appropriate personal protective equipment.
P282	Wear cold insulating gloves/face shield/eye protection	No change	No change
P283	Wear fire/flame resistant/retardant clothing	No change	No change
P284 P285	Wear respiratory protection In case of inadequate ventilation wear respiratory protection	Redundancy. Also, not clear why P285 appropriate for respiratory sensitisers only rather than P284 – it is also a lot less simple than P284 and it may be difficult for users to judge whether there is 'adequate' ventilation.	Replace P285 with P284: Wear respiratory protection.
P301 P302 P303 P304 P305 P306	IF SWALLOWED: IF ON SKIN: IF ON SKIN (or hair): IF INHALED: IF IN EYES: IF ON CLOTHING:	Some redundancy between P302 and P303	Delete P302 (use P303 instead).
P307 P308 P309	IF exposed: IF exposed or concerned: IF exposed or if you feel unwell:	Some redundancy. However may want to retain P308 for CMRs and separate PS for cat 1 and 2 STOT.	Replace P309 with <b>IF you feel unwell:</b>
P310	Immediately call a POISON CENTER or doctor/physician	Redundancy, esp. as regards 310-312 and 313-315. Not all jurisdictions have	Use only: P310 Immediately call a POISON CENTER/or doctor/physician/, P311 Call a POISON CENTER/or
P311 P312	Call a POISON CENTER or doctor/physician Call a POISON CENTER or	Poison Centres which can be called by workers/ members of the public. Need flexibility for manufacturers/suppliers to	doctor/physician/ and Call a POISON CENTER/or doctor/physician/ if you feel unwell. Add note in column 5, "manufacturer/supplier or the competent authority to specify the
P313 P314	doctor/physician if you feel unwell Get medical advice/attention Get medical advice/attention if you feel	specify source of first line medical advice.	appropriate source of medical advice." Also add note in column 5 that 'The statement "Get immediate medical advice/attention" may be used on labels where more than one possible source of medical attention is
P315	unwell Get immediate medical advice/attention		available'.

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Annex 1: List of suggested changes to precautionary statements with brief explanations (Rationalisation) (cont'd)

Code	Statement	Issue	Suggested change
P320	Specific treatment is urgent (see on this	Redundancy. Urgency will be indicated	Replace with specific treatment (see on this label).
	label)	by P310 and P311 – i.e. P320 only	
P321	Specific treatment (see on this label)	applies to acute tox cat 1,2 – this is also	
P322	Specific measures (see on this label)	given P310. No real difference between	
		'treatment' and 'measures'.	
P330	Rinse mouth	None	None
P331	Do NOT induce vomiting	None	None
P332	If skin irritation occurs	P332 is redundant	Replace with: P333 If skin irritation or rash occurs
P333	If skin irritation or rash occurs		
P334	Immerse in cool water/wrap in wet	None	None
	bandages		
P335	Brush off loose particles from skin	None	None
P336	Thaw frosted parts with lukewarm water.	None	None
	Do not rub affected area.		
P337	If eye irritation persists:	None	None
P338	Remove contact lenses, if present and easy	None	None
	to do. Continue rinsing.		
P340	Remove victim to fresh air and keep at rest	P341 and P342 only apply to respiratory	Delete P342. Replace P341 with <b>If breathing is difficult, remove</b>
	in a position comfortable for breathing	sensitisation cat 1, and the content can	vietim individual to fresh air and keep at rest in a position
P341	If breathing is difficult, remove victim to	better be expressed in a combined	<b>comfortable for breathing.</b> Instead of P342+P311, add P311 to
	fresh air and keep at rest in a position	precautionary statement which doesn't	combined statement P304+341 to form a single statement: IF
	comfortable for breathing.	use P342. The word 'victim' is not ideal	INHALED: If breathing is difficult, remove victim to fresh air and
P342	If experiencing respiratory symptoms:	in this context – 'individual' is better.	keep at rest in a position comfortable for breathing. Call a
			POISON CENTER/doctor/physician/
P350	Gently wash with plenty of soap and water.	Redundancy – though P351 should be	Replace P350, P352 and P353 with: P352 wash skin with plenty of
P351	Rinse cautiously with water for several	kept separate as applies specifically to	water.
	minutes.	eyes. Soap may not always be available.	
P352	Wash with plenty of soap and water	Encouraging people to use "soap and	
P353	Rinse skin with water/shower	water" could discourage quick action.	
		Therefore, the PS should be modified to	
		focus on using water.	
P360	Rinse immediately contaminated clothing	None	None
	and skin with plenty of water before		

Annex 1: List of suggested changes to precautionary statements with brief explanations (Rationalisation) (cont'd)

Code	Statement	Issue	Suggested change
	removing clothes		
P361	Remove/take off immediately all	Redundancy, same can be accomplished	Replace P361-P363 with:
	contaminated clothing	with fewer statements. Removing	P361: Remove/Immediately take off immediately all contaminated
P362	Take off contaminated clothing and wash	contaminated clothing and washing	clothing. Wash before reuse
	before reuse.	before re-use go together (one action	P362: Take off contaminated clothing. Wash before re-use.
P363	Wash contaminated clothing before reuse.	doesn't make sense without the other).	
		No need to have both 'remove' and 'take	
		off'.	
P370	In case of fire:	None	None
P371	In case of major fire and large quantities	None	None
P372	Explosion risk in case of fire	None	None
P373	DO NOT fight fire when fire reaches	None	None
	explosives		
P374	Fight fire with normal precautions from a	None	None
	reasonable distance.		
P375	Fight fire remotely due to risk of explosion	None	None
P376	Stop leak if safe to do so	None	None
P377	Leaking gas fire: Do not extinguish, unless	None	None
	leak can be stopped safely		
P378	Use for extinction	'Extinction' not the clearest phrase here	Replace with P378: Use to extinguish
P380	Evacuate area	None	None
P381	Eliminate all ignition sources if safe to do	None	None
	SO		
P390	Absorb spillage to prevent material-damage	None	None
P391	Collect spillage	None	None
P401	Store	None	None
P402	Store in a dry place	None	None
P403	Store in a well-ventilated place	None	None
P404	Store in a closed container	Redundancy with P233	Delete – see P233.
P405	Store locked up	None	None.
P406	Store in corrosive resistant/container with a resistant inner liner.	None	None
P407	Maintain air gap between pallets	None	None

Annex 1: List of suggested changes to precautionary statements with brief explanations (Rationalisation) (cont'd)

Code	Statement	Issue	Suggested change
P410	Protect from sunlight	None	None
P411	Store at temperatures not exceeding°C/°F	None	None
P412	Do not expose to temperatures exceeding 50°C/122°F	None	None
P413	Store bulk masses greater thankg/lbs at temperatures not exceeding°C/°F	None	None
P420	Store away from other materials	Redundancy (P220)	Delete – see P220
P422	Store contents under	Redundancy (P231)	Delete – see P422
P501	Dispose of contents/container to	None	None

Annex 2: Suggested changes to precautionary statements (amendments to physical hazard statements)

Code	Prevention precautionary statements	Hazard class	Hazard category	Conditions for use
P234	Keep only in original container	Explosives (chapter 2.1)	<u>Unstable explosives</u> <u>and Divisions 1.1,</u> <u>1.2, 1.3, 1.4, 1.5</u>	For explosives, self-reactive substances and organic peroxides repackaging may result in a different hazard category
		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	
		Substances and mixtures corrosive to metals (2.16)	1	
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	Flammable liquids (chapter 2.6)	1, 2	manufacturer/supplier or the competent authority to specify equipment
	equipment	Flammable liquids (chapter 2.6)	3	manufacturer/supplier or the competent authority to specify equipment - if product is volatile so as to generate hazardous atmosphere.
		Flammable solids (chapter 2.7)	1, 2	manufacturer/supplier or the competent authority to specify equipment - if dust clouds can occur
P242	Use only non-sparking tools	Flammable gases (chapter 2.6)	<u>1, 2</u>	- if product is sensitive to mechanical sparks
		Flammable liquids (chapter 2.6)	1, 2	
ı		Flammable liquids (chapter 2.6)	3	- if product is volatile so as to generate hazardous atmosphere and sensitive to mechanical sparks

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Annex 2: Suggested changes to precautionary statements (amendments to physical hazard statements) (cont'd)

Code	Prevention precautionary statements	Hazard class	Hazard category	Conditions for use
P243	Take precautionary measures against	Flammable liquids (chapter 2.6)	1, 2	- if material is electrostatically sensitive
	static discharge	Flammable liquids (chapter 2.6)	3	- if product is volatile so as to generate hazardous atmosphere and electrostatically sensitive
P370	In case of fire:	Explosives (chapter 2.1)	Divisions1.1,	
			1.2, 1.3, 1.4, 1.5	
		Oxidizing gases (chapter 2.4)	1	
		Flammable liquids (chapter 2.6)	1, 2, 3, 4	
		Flammable solids (chapter 2.7)	1, 2	
		Self-reactive substances and mixtures	Types A, B, C,	
		(chapter 2.8)	D, E, F	
		Pyrophoric liquids (chapter 2.9)	1	
		Pyrophoric solids (chapter 2.10)	1	
		Substances and mixtures which, in	1, 2, 3	
		contact with water, emit flammable	, ,	
		gases (chapter 2.12)		
		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	
P372	Explosion risk in case of fire	Explosives (chapter 2.1)	Unstable	- except if explosives are 1.4S AMMUNITION OR
	-		explosives and	COMPONENTS THEREOF
			Divisions 1.1,	
			1.2, 1.3, 1.4, 1.5	
P373	DO NOT fight fire when fire reaches	Explosives (chapter 2.1)	Unstable	- except if explosives are 1.4S
	explosives	_	explosives and	
			Divisions 1.1,	
			1.2, 1.3, 1.4, 1.5	
P374	Fight fire with normal precautions	Explosives (chapter 2.1)	Division 1.4	- <u>except</u> if explosives are 1.4S AMMUNITION OR
	from a reasonable distance			COMPONENTS THEREOF

Annex 2: Suggested changes to precautionary statements (amendments to physical hazard statements) (cont'd)

Code	Prevention precautionary statements	Hazard class	Hazard category	Conditions for use
P375	Fight fire remotely due to 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	
		Organic Peroxides (chapter 2.15)	Types A, B	
P378	Use for extinction to extinguish	Flammable liquids (chapter 2.6)	1, 2, 3, 4	Manufacturer/supplier or the competent authority to
		Flammable solids (chapter 2.7)	1, 2	specify appropriate media
		Self reactive substances and mixtures	Types A, B, C,	- if water increases risk
		(chapter 2.8)	D, E, F	
		Pyrophoric liquids (chapter 2.9)	1	
		Pyrophoric solids (chapter 2.10)	1	
		Substances and mixtures which, in	1, 2, 3	
		contact with water, emit flammable		
		gases (chapter 2.12)		
		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,	- except if explosives are 1.4 S
			1.2, 1.3, 1.4, 1.5	
		Self-reactive substances and mixtures	Types A, B	
		(chapter 2.8)		
		Oxidising liquids (chapter 2.13)	1	
		Oxidising solids (chapter 2.14)	1	
		Organic peroxides (chapter 2.15)	Types A, B	
DOTE	T 00 T		1 2 2 4	
P370	In case of fire: Use for extinction to	Flammable liquids (chapter 2.6)	1, 2, 3, 4	Manufacturer/supplier to specify appropriate media.
+	<u>extinguish</u>	Flammable solids (chapter 2.7)	1, 2	- if water increases risk
P378		Self reactive substances and mixtures	Types A, B, C,	
		(chapter 2.8)	D, E, F	
		Pyrophoric liquids (chapter 2.9)	1	
		Pyrophoric solids (chapter 2.10)	1	

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Annex 2: Suggested changes to precautionary statements (amendments to physical hazard statements) (cont'd)

Code	Prevention precautionary statements	Hazard class	Hazard	Conditions for use
			category	
		Substances and mixtures which, in	1, 2, 3	
		contact with water, emit flammable		
		gases (chapter 2.12)		
		Oxidising liquids (chapter 2.13)	1, 2, 3	
		Oxidising solids (chapter 2.14)	1, 2, 3	
		Organic peroxides (chapter 2.15)	Types A, B, C,	
			$\mathbf{D}, \mathbf{E}, \mathbf{F}$	
P370	In case of fire: Evacuate area	Explosives (chapter 2.1)	Divisions 1.1,	- except if explosives are 1.4 S
+			1.2, 1.3, 1.4, 1.5	
P380				
P370	In case of fire: Evacuate area. Fight	Self-reactive substances and mixtures	Types A, B	
+	fire remotely due to the risk of	(chapter 2.8)		
P380	explosion.	Organic peroxides (chapter 2.15)	Types A, B	
+				
P375				
P403	Store in a well-ventilated place	Flammable gases (chapter 2.2)	1, 2	
	•	Oxidising 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	Tyeps A, B, C,	
		bell reactive substances and infatures		
		(chapter 2.8)	D, E, F	
		(chapter 2.8)	D, E, F	
			D, E, F <b>Types A, B, C,</b>	
		(chapter 2.8)	D, E, F	- if product is volatile so as to generate a hazardous

Annex 2: Suggested changes to precautionary statements (amendments to physical hazard statements) (cont'd)

Code	Prevention precautionary statements	Hazard class	Hazard category	Conditions for use
		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	
P410	Protect from sunlight	Flammable aerosols (chapter 2.3)	1, 2	
		Gases under pressure (chapter 2.5)	Compressed gas	- To be used in countries where the likelihood exists
			Liquefied gas	for the content of the receptacle to exceed 60°C if the
			Dissolved gas	receptacle is not protected from sunshine
		Self-reactive substances and	Types A, B, C,	
		mixtures (chapter 2.8)	<u>D, E, F</u>	
		Self-heating substances and mixtures	1, 2	
		(chapter 2.11)		
		Organic peroxides (chapter 2.15)	Types A, B, C,	
			D, E, F	
D 102	I a		1 2 2 4	T
P403	Store in a well-ventilated place. Keep	Flammable liquids (chapter 2.6)	1, 2, 3, 4	
+ D225	cool	Self-reactive substances and mixtures	Types A, B, C,	
P235		(chapter 2.8)	D, E, F	
		Organic peroxides (chapter 2.15)	Types A, B, C,	
			$\mathbf{D}, \mathbf{E}, \mathbf{F}$	

#### Annex 3:

## Tables A3.2.1, A3.2.2, A3.2.3, A3.2.4 incorporating all proposed changes (marked up)<sup>1</sup>

#### **Table A3.2.1 Codification of general precautionary statements**

Code	Precautionary statement	Hazard class	Hazard	Conditions for use
			category	
P101	If medical advice is needed, have product	As appropriate		Consumer products
	container or label at hand.			
P102	Keep out of reach of children	As appropriate		Consumer products
P103	Read entire label before use	As appropriate		Consumer products, and others as appropriate
P104	Do not use until all safety precautions have been	As appropriate		Consumer products, and others as appropriate
	read and understood.			

Code	Precautionary statement	Hazard class	Hazard	Conditions for use
			category	
P201	Obtain special instructions before use			
P202	Do not handle until all safety precautions have	Explosives (chapter 2.1)	Unstable	
	been read and understood		explosive	
		Germ cell mutagenicity (chapter 3.5)	1A, 1B, 2	
		Carcinogenicity (chapter 3.6)	1A, 1B, 2	
		Reproductive toxicity (chapter	1A, 1B, 2	
		3.7)		
		Reproductive toxicity, effects	Additional	
		on or via lactation (chapter	category	
		3.7)		
P210	Keep away from heat/sparks/open flames/hot	No change		
	surfaces. – No smoking.			
P211	Do not spray on an open flame or other ignition	No change		
	source			

<sup>&</sup>lt;sup>1</sup> Throughout, additions are indicated in **bold underlined text**, and deletions in strikethrough.

Table A3.2.2: Codification of prevention precautionary statements (cont'd)

Code	Precautionary statement	Hazard class	Hazard category	Conditions for use
P220	Keep/store away from clothing//other	Oxidizing gases (chapter 2.4)	1	Manufacturer/supplier or the competent authority to
	materials/combustible materials.	Self-reactive substances and	Types	specify other incompatible materials.
		mixtures (chapter 2.8)	A, B, C, D, E,	- 'keep' should be used when the chemical should
		1	F	be kept away from the specified materials at all
		Self-heating substances and	<u>1, 2</u>	times, whereas 'store' should be used when this
		mixtures (chapter 2.11)		precaution only applies to storage
		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 clothing and other
		Oxidizing solids (chapter 2.14)	1	combustible materials.
P221	Take any precaution to avoid mixing with	Oxidizing liquids (chapter 2.13)	1, 2, 3	Manufacturer/supplier or the competent authority to
	combustibles Do not mix with combustibles/	Oxidising solids (chapter 2.14)	1, 2, 3	specify other incompatible materials.
P222	Do not allow contact with air	No change		
P223	Keep away from any possible contact with	No change		
	water, because of violent reaction and possible			
	flash fire			
D220				T
P230	Keep wetted with	No change		
P231	Handle under inert gas	No change		
P232	Protect from moisture	No change	1.2.2	
P233	Keep <u>in a container</u> tightly closed <u>container</u>	Flammable liquids (chapter 2.6)	1,2,3	-
		Substances and mixtures	<u>1,2,3</u>	
		which, in contact with water,		
		emit flammable gases (chapter 2.12)		
		Acute toxicity, inhalation	1,2,3	-if product is volatile so as to generate hazardous
		(chapter 3.1)		atmosphere

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## Annex 3 (cont'd)

Code	Precautionary statement	Hazard class	Hazard category	Conditions for use
		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	
P234	Keep only in original container	Explosives (chapter 2.1)	Unstable explosives and Divisions 1.1, 1.2, 1.3, 1.4, 1.5	For explosives, self-reactive substances and organic peroxides repackaging may result in a different hazard category
		Self reactive substances and mixtures (chapter 2.8) Organic Peroxides (chapter 2.15)	Types A, B, C, D, E, F Types A, B, C, D, E, F	
		Substances and mixtures corrosive to metals (2.16)	1	
P235	Keep cool	No change		
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	manufacturer/supplier or the competent authority to specify equipment

Code	Precautionary statement	Hazard class	Hazard category	Conditions for use
		Flammable liquids (chapter 2.6)	3	manufacturer/supplier or the competent authority to specify equipment  - if product is volatile so as to generate hazardous atmosphere.
		Flammable solids (chapter 2.7)	1, 2	manufacturer/supplier or the competent authority to specify equipment - if dust clouds can occur
P242	Use only non-sparking tools	Flammable gases (chapter 2.2) Flammable liquids (chapter 2.6)	1, 2 1, 2	- if product is sensitive to mechanical sparks
		Flammable liquids (chapter 2.6)	3	- if product is volatile so as to generate hazardous atmosphere and sensitive to mechanical sparks
P243	Take precautionary measures against static	Flammable liquids (chapter 2.6)	1, 2	- if material is electrostatically sensitive
	discharge	Flammable liquids (chapter 2.6)	3	- if product is volatile so as to generate hazardous atmosphere and electrostatically sensitive
P244	Keep cylinder valves and pressure regulators free from grease and oil.	Oxidizing gases (chapter 2.4)	1	
P250	Do not subject to grinding/shock/friction	No change		
P251	Pressurized container: Do not pierce or burn, even after use.	No change		
P260	Do not <u>create/</u> breathe dust/fume/gas/mist/vapours/spray	Acute toxicity – inhalation (chapter 3.1)	1,2, <u><b>3,4</b></u>	Manufacturer/supplier or the competent authority to specify <b>practicable precaution and</b> applicable conditions.
		Skin corrosion (chapter 3.2)	1A, 1B, 1C	<ul> <li>specify do not breathe dusts or mists</li> <li>if inhalable particles of dusts or mists may occur during use.</li> </ul>
		Respiratory sensitization (chapter 3.4)	<u>1</u>	Manufacturer/supplier or the competent authority to specify <b>practicable precaution and</b> applicable

Code	Precautionary statement	Hazard class	Hazard category	Conditions for use
		Skin sensitization (chapter 3.4)	1	conditions.
		Reproductive toxicity – effects on or via lactation (chapter 3.7)	Additional category	- specify do not breathe dusts or mists - if inhalable particles of dusts or mists may occur during use
		Specific target organ toxicity, single exposure (chapter 3.8)	1,2	Manufacturer/supplier or the competent authority to specify <b>practicable precaution and</b> applicable
		Specific target organ toxicity, single exposure; respiratory tract irritation (chapter 3.8)	<u>3</u>	conditions.
		Specific target organ toxicity, single exposure; narcotic effects (chapter 3.8)	3	
		Specific target organ toxicity, repeated exposure (chapter 3.9)	1,2	
P261	Avoid breathing dust/fume/gas/mist/vapours/spray			
P262	Do not get in eyes, on skin, or on clothing	No change		
P263	Avoid contact during pregnancy/ while nursing	No change		
P264	Wash thoroughly after handling	No change		
		Tax .	T	1
P270	Do not eat/drink or smoke when using this product	No change		
P271	Use only outdoors in a well-ventilated area	No change		
P272	Contaminated work clothing should not be allowed out of the workplace.	No change		
P273	Avoid release to the environment	No change		
P280	Wear protective gloves/protective clothing/eye protection/face protection/	Explosives (chapter 2.1)	Unstable explosives, 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.

Table A3.2.2: Codification of prevention precautionary statements (cont'd)

Code	Precautionary statement	Hazard class	Hazard category	Conditions for use
		Flammable liquids (chapter 2.6)	1, 2, 3, 4	- specify protective gloves and eye/face protection
		Flammable solids (chapter 2.7)	1, 2	Manufacturer/supplier or the competent authority to
		Self-reactive substances and	Types A, B, C,	specify type of equipment
		mixtures (chapter 2.8)	D, E, F	
		Pyrophoric liquids (chapter 2.9)	1	
		Pyrophoric solids (chapter 2.10)	1	
		Self-heating substances and	1, 2	
		mixtures (chapter 2.11)		
		Substances and mixtures which,	1, 2, 3	
		in contact with water, emit		
		flammable gases (chapter 2.12)		
		Oxidizing liquids (chapter 2.13)	1, 2, 3	
		Oxidizing solids (chapter 2.14)	1, 2, 3	
		Organic peroxides (chapter	Types A, B, C,	- specify protective gloves and eye/face protection
		2.15)	D, E, F	Manufacturer/supplier or the competent authority to specify type of equipment
		Acute toxicity – dermal (chapter 3.1)	1, 2, 3, 4	- specify protective gloves/clothing
		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	Manufacturer/supplier or the competent authority to specify type of equipment
		Severe eye damage (chapter	1	- specify eye/face protection
		3.3)		Manufacturer/supplier or the competent authority to
				specify type of equipment
		Eye irritation (chapter 3.3)	2A	- specify eye/face protection
				Manufacturer/supplier or the competent authority to
				specify type of equipment

Code	Precautionary statement	Hazard class	Hazard category	Conditions for use
		Germ cell mutagenicity	1A, 1B, 2	Manufacturer/supplier or the competent
		(chapter 3.5)		authority to specify appropriate personal
		Carcinogenicity (chapter 3.6)	1A, 1B, 2	protective equipment.
		Reproductive toxicity (chapter	1A, 1B, 2	
		3.7)		
P281	Use personal protective equipment as required			
P282	Wear cold insulating gloves/face shield/eye	No change		
	protection			
P283	Wear fire/flame resistant/retardant clothing	No change		
P284	Wear respiratory protection	Acute toxicity, inhalation	1,2	Manufacturer/supplier or the competent authority to
		(chapter 3.1)		specify equipment
		Respiratory sensitization	<u>1</u>	
		(chapter 3.4)		
P285	In case of inadequate ventilation wear respiratory			
	protection			

Annex 3 (cont'd)

Code	Precautionary statement	Hazard class	Hazard category	Conditions for use
P301	IF SWALLOWED:	No change		
P302	IF ON SKIN:			
P303	IF ON SKIN (or hair):	Flammable liquids (chapter 2.6)	1,2,3	
		Pyrophoric liquids (chapter 2.9)	<u>1</u>	
		Acute toxicity, dermal (chapter 3.1)	1,2,3,4	
		Skin irritation (chapter 3.2)	<u>2</u>	
		Skin corrosion (chapter 3.2)	1A, 1B, 1C	
		Skin sensitization (chapter 3.4)	<u>1</u>	
P304	IF INHALED:	No change		
P305:	IF IN EYES:	No change		
P306:	IF ON CLOTHING:	No change		
P307	IF exposed:	No change		
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	Additional	
		lactation (chapter 3.7	category	
P309	IF exposed or if you feel unwell:	Specific target organ toxicity, single exposure (chapter 3.8)	2	
P310	Immediately call a POISON	Gases under pressure (chapter 2.5)	Refrigerated	Manufacturer/supplier or the competent
	CENTER/doctor/physician/		liquefied gas	authority to specify the appropriate source
		Acute toxicity, oral (chapter 3.1)	1,2,3	of medical attention.
		Acute toxicity, dermal (chapter 3.1)	1,2	
		Acute toxicity, inhalation (chapter 3.1)	1,2	The statement "Get immediate medical
		Skin corrosion (chapter 3.2)	1A, 1B, 1C	advice/attention" may be used on labels
		Severe eye damage (chapter 3.3)	1	where more than one possible source of
		Aspiration hazard (chapter 3.10)	1,2	medical attention is available.
P311	Call a POISON	Acute toxicity, inhalation (chapter 3.1)	3	Manufacturer/supplier or the competent
	CENTER/doctor/physician/	Skin irritation (chapter 3.2)	2, 3	authority to specify the appropriate source
		Eye irritation (chapter 3.3)	2A, 2B	of medical attention.
		Respiratory sensitisation (chapter 3.4)	1	

Code	Precautionary statement	Hazard class	Hazard category	Conditions for use
		Skin sensitisation (chapter 3.4)	1	The statement "Get medical
		Germ cell mutagenicity (chapter 3.5)	1A, 1B, 2	advice/attention" may be used on labels
		Carcinogenicity (chapter 3.6)	1A, 1B, 2	where more than one possible source of
		Reproductive toxicity (chapter 3.7)	1A, 1B, 2	medical attention is available.
		Reproductive toxicity, effects on or via	1A, 1B, 2	
		<u>lactation (chapter 3.7)</u>		
		Specific target organ toxicity, single	1, 2	
		exposure (chapter 3.8)		
P312	Call a POISON	Acute toxicity, oral (chapter 3.1)	4	Manufacturer/supplier or the competent
	CENTER/doctor/physician/ if you feel	Acute toxicity, oral (chapter 3.1)	5	authority to specify the appropriate source
	unwell	Acute toxicity, dermal (chapter 3.1)	3, 4, 5	of medical attention.
		Acute toxicity, inhalation (chapter 3.1)	4	
		Acute toxicity, inhalation (chapter 3.1)	5	The statement "Get medical
		Specific target organ toxicity, single	3	advice/attention if you feel unwell" may be
		exposure; respiratory tract irritation		used on labels where more than one
		(chapter 3.8)		possible source of medical attention is
		Specific target organ toxicity, single	3	<u>available.</u>
		exposure; narcotic effects (chapter 3.8)		
		Specific target organ toxicity, repeated exposure (chapter 3.9)	<u>1,2</u>	
P313	Get medical advice/attention			
P314	Get medical advice/attention if you feel unwell			
P315	Get immediate medical advice/attention			
D220		T		
P320	Specific treatment is urgent (see on this label)			
P321	Specific treatment (see on this label)	Acute toxicity, oral (chapter 3.1)	1,2,3	
		Acute toxicity, dermal (chapter 3.1)	1,2,3,4	
		Acute toxicity, inhalation (chapter 3.1)	<u>1,2,3</u>	
		Skin corrosion (chapter 3.2)	1A, 1B, 1C	

Code	Precautionary statement	Hazard class	Hazard category	Conditions for use
		Skin irritation (chapter 3.2)	2	
		Skin sensitization (chapter 3.4)	1	
		Specific target organ toxicity, single	1	
		exposure (chapter 3.8)		
P322	Specific measures (see on this label)			
P330	Rinse mouth	No change		
P331	Do NOT induce vomiting	No change		
P332	If skin irritation occurs:			
P333	If skin irritation or rash occurs:	Skin irritation (chapter 3.2)	<u>2,3</u>	
		Skin sensitisation (chapter 3.4)	1	
P334	Immerse in cool water/wrap in wet bandages	No change		
P335	Brush off loose particles from skin	No change		
P336	Thaw frosted parts with lukewarm water.	No change		
	Do not rub affected area			
P337	If eye irritation persists:	No change		
P338	Remove contact lenses, if present and easy to do. Continue rinsing.	No change		
	uo. Continue Imsing.			
P340	Remove victim individual to fresh air and	Acute toxicity, inhalation (chapter 3.1)	1,2,3,4	
	keep at rest in a position comfortable for	Skin corrosion (chapter 3.2)	1A, 1B, 1C	
	breathing	Specific target organ toxicity, single	3	
		exposure; respiratory tract irritation		
		(chapter 3.8)		
		Specific target organ toxicity, single	3	
		exposure; narcotic effects (chapter 3.8)		
P341	If breathing is difficult, remove <del>victim</del>	Respiratory sensitization (chapter 3.4)	1	
	individual to fresh air and keep at rest in a			
	position comfortable for breathing			
P342	If experiencing respiratory symptoms			

Gently wash with plenty of soap and water Rinse cautiously with water for several			1
•			
minutes.	No change		
Wash <u>skin</u> with plenty of <del>soap and</del> water	Flammable liquids (chapter 2.6)	1,2,3	
	Acute toxicity, dermal (chapter 3.1)	<u>1,2,</u> 3,4	
	Skin corrosion (chapter 3.2)	1A, 1B, 1C	
	Skin irritation (chapter 3.2)	2	
	Skin sensitization (chapter 3.4)	1	
Rinse skin with water/shower	<del>-</del>		
Rinse immediately contaminated clothing and	Oxidizing liquids (chapter 2.13)	1	
skin with plenty of water before removing clothes.	Oxidizing solids (chapter 2.14)	1	
Remove Immediately Ttake off immediately	Flammable liquids (chapter 2.6)	1,2,3	
all contaminated clothing . Wash before reuse	Acute toxicity, dermal (chapter 3.1)	1,2,3	
	Skin corrosion (chapter 3.2)	1A, 1B. 1C	
Take off <del>all</del> contaminated clothing. Wash	Acute toxicity, dermal (chapter 3.1)	4	
before re-use	Skin irritation (chapter 3.2)	2	
	Skin sensitization (chapter 3.4)	1	
Wash contaminated clothing before re-use			
In some of Cura.	Eurolasius (abantan 2.1)	Dininianal 1	I
in case of fire:	Explosives (chapter 2.1)	· · · · · · · · · · · · · · · · · · ·	
	Ovidizing gasas (shantar 2.4)	1.3	
		1 2 2 4	
		/	
		1 1	
		1	
F s c F a	Rinse immediately contaminated clothing and kin with plenty of water before removing lothes.  Remove Immediately Ttake off immediately ll contaminated clothing . Wash before reuse  Cake off all contaminated clothing. Wash before re-use	Skin corrosion (chapter 3.2) Skin irritation (chapter 3.2) Skin sensitization (chapter 3.4)  Rinse skin with water/shower  Cinse immediately contaminated clothing and kin with plenty of water before removing lothes.  Remove Immediately Ttake off immediately ell contaminated clothing . Wash before reuse  Cake off all contaminated clothing. Wash before reuse  Cake off all contaminated clothing. Wash before reuse  Skin corrosion (chapter 2.13)  Cake off all contaminated clothing. Wash before reuse  Skin corrosion (chapter 3.1) Skin corrosion (chapter 3.2)  Skin irritation (chapter 3.2)  Skin sensitization (chapter 3.2)  Skin sensitization (chapter 3.4)	Skin corrosion (chapter 3.2)   1A, 1B, 1C

Code	Precautionary statement	Hazard class	Hazard	Conditions for use
			category	
		Substances and mixtures which, in	1, 2, 3	
		contact with water, emit flammable gases		
		(chapter 2.12)		
		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	
P370	In case of fire:	No change		
P371	In case of major fire and large quantities	No change		
P372	Explosion risk in case of fire	Explosives (chapter 2.1)	Unstable	- except if explosives are 1.4S AMMUNITION
			explosives and	OR COMPONENTS THEREOF
			divisions 1.1,	
			1.2, 1.3, 1.4,	
			1.5	
P373	DO NOT fight fire when fire reaches explosives	Explosives (chapter 2.1)	Unstable	- except if explosives are 1.4S
			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	- except if explosives are 1.4S AMMUNITION OR COMPONENTS THEREOF
P375	Fight fire remotely due to risk of explosion	Self-reactive substances and mixtures	Types A, B	
		(chapter 2.8)		
		Oxidizing liquids (chapter 2.13)	1	
		Oxidizing solids (chapter 2.14)	1	
		Organic peroxides (chapter 2.15)	Types A, B	
P376	Stop leak if safe to do so	No change		
P377	Leaking gas fire: Do not extinguish, unless leak can be stopped safely	No change		
P378	Use for extinction to extinguish	Flammable liquids (chapter 2.6)	1, 2, 3, 4	Manufacturer/supplier or the competent
		Flammable solids (chapter 2.7)	1, 2	authority to specify appropriate media

Code	Precautionary statement	Hazard class	Hazard	Conditions for use
			category	
		Self reactive substances and mixtures	Types A, B, C,	- if water increases risk
		(chapter 2.8)	D, E, F	
		Pyrophoric liquids (chapter 2.9)	1	
		Pyrophoric solids (chapter 2.10)	1	
		Substances and mixtures which, in	1, 2, 3	
		contact with water, emit flammable gases		
		(chapter 2.12)		
		Oxidizing liquids (chapter 2.13)	1, 2, 3	
		Oxidizing solids (chapter 2.14)	1, 2, 3	
1				
P380	Evacuate area	Explosives (chapter 2.1)	Unstable	
			explosives	
		Explosives (chapter 2.1)	Divisions 1.1,	- except if explosives are 1.4 S
		_	1.2, 1.3, 1.4,	
			1.5	
		Self-reactive substances and mixtures	Types A, B	
		(chapter 2.8)		
		Oxidising liquids (chapter 2.13)	1	
		Oxidising solids (chapter 2.14)	1	
		Organic peroxides (chapter 2.15)	Types A, B	
P381	Eliminate all ignition sources if safe to do so	No change		
P390	Absorb spillage to prevent material-damage	No change		
P391	Collect spillage	No change		
P301	IF SWALLOWED: Immediately call a POISON	Acute toxicity, oral (chapter 3.1)	1,2,3	Manufacturer/supplier or the competent
+	CENTER or/doctor/physician	Aspiration hazard (chapter 3.10)	1,2	authority to specify the appropriate source
P310		Aspiration hazaru (chapter 5.10)	1,4	of medical attention.
				The statement "Get immediate medical
				advice/attention" may be used on labels
				where more than one possible source of
				medical attention is available.

Code	Precautionary statement	Hazard class	Hazard	Conditions for use
- 7 - 7			category	
P301	IF SWALLOWED: call a POISON CENTER/or	Acute toxicity, oral (chapter 3.1)	4	Manufacturer/supplier or the competent
+	doctor/physician if you feel unwell.			authority to specify the appropriate source
P312				of medical attention.
				The statement "Get immediate medical
				advice/attention" may be used on labels
				where more than one possible source of
				medical attention is available.
P301	IF SWALLOWED: Rinse mouth. Do NOT	No change		
+	induce vomiting			
P330				
+				
P331	WE COVICINAL ( ) I I I I	N 1		
P302	IF ON SKIN (or hair): Immerse in cool	No change		
<u>P303</u>	water/wrap in wet bandages.			
+ P334				
P302	IF ON SKIN (or hair): Gently wash skin with	Acute toxicity, dermal (chapter 3.1)	1,2	
P303	plenty of water/soap and water	Acute toxicity, dermal (chapter 3.1)  Acute toxicity, dermal (chapter 3.1)	3,4	
+	picity of water/soup and water	Skin irritation (chapter 3.2)	2	
P350		Skin sensitization (chapter 3.4)	1	
P352		Skin sensitization (chapter 3.7)	1	
P303	IF ON SKIN (or hair): Remove/ Take off	Flammable liquids (chapter 2.6)	1,2,3	
+	immediately all contaminated clothing. Rinse	1	, ,-	
P361	skin with water/shower. Wash skin with plenty	Skin corrosion (chapter 3.2)	1A, 1B, 1C	
+	of water			
P353				
P352				

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## Annex 3 (cont'd)

Code	Precautionary statement	Hazard class	Hazard category	Conditions for use
P304 + P312	IF INHALED: Call a POISON CENTER/or doctor/physician if you feel unwell.	Acute toxicity, inhalation (chapter 3.1)	5	Manufacturer/supplier or the competent authority to specify the appropriate source of medical attention. The statement "Get immediate medical advice/attention" may be used on labels where more than one possible source of medical attention is available.
P304	IF INHALED: Remove victim to fresh air	No change		
+ P340	and keep at rest in a position comfortable for breathing.			
P304 + P341 ± P311	IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. <u>Call a POISON CENTER/doctor/physician/</u>	Respiratory sensitisation (chapter 3.4)	1	
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.	No change.		
P306 + P360	IF ON CLOTHING: Rinse immediately contaminated clothing and skin with plenty of water before removing clothes.	No change.		
<del>P307</del> + <del>P311</del>	If exposed: call a POISON CENTRE or doctor/physician			
P308	If exposed or concerned: get medical	Germ cell mutagenicity (chapter 3.5)	1A, 1B, 2	Manufacturer/supplier or the competent
+	advice/attention call a POISON	Carcinogenicity (chapter 3.6)	1A, 1B, 2	authority to specify the appropriate source
P313	CENTRE/doctor/physician/	Reproductive toxicity (chapter 3.7)	1A, 1B, 1	of medical attention.
		Reproductive toxicity, effects on or via	Additional	The statement "Get immediate medical
		lactation (chapter 3.7)	category	advice/attention" may be used on labels

Code	Precautionary statement	Hazard class	Hazard category	Conditions for use
				where more than one possible source of medical attention is available.
P309 + P311	If exposed or you feel unwell: call a POISON CENTER or doctor/physician.	Specific target organ toxicity, single exposure (chapter 3.8)	<u>1,</u> 2	
P332 + P313	If skin irritation occurs: Get medical advice/attention			
P333	If skin irritation or rash occurs: get medical	Skin irritation (chapter 3.2)	2,3	Manufacturer/supplier or the competent
+ P313	advice/attention-Call a POISON CENTER/doctor/physician	Skin sensitisation (chapter 3.4)	1	authority to specify the appropriate source of medical attention.  The statement "Get immediate medical advice/attention" may be used on labels where more than one possible source of medical attention is available.
P335 + P334	Brush off loose particles from skin. Immerse in cool water/wrap in wet bandages.	No change.		
P337 + P313	If eye irritation persists: Get medical advice/attention-Call a POISON CENTER/doctor/physician	Eye irritation (chapter 3.3)	2A, 2B	Manufacturer/supplier or the competent authority to specify the appropriate source of medical attention.  The statement "Get immediate medical advice/attention" may be used on labels where more than one possible source of medical attention is available.
P342 + P311	If experiencing respiratory symptoms: get medical advice/attention			
P370 + P376	In case of fire: Stop leak if safe to do so.	No change		

Code	Precautionary statement	Hazard class	Hazard	Conditions for use
			category	
P370	In case of fire: Use for extinction	Flammable liquids (chapter 2.6)	1, 2, 3, 4	Manufacturer/supplier to specify
+		Flammable solids (chapter 2.7)	1, 2	appropriate media.
P378		Self reactive substances and mixtures	Types A, B, C,	- if water increases risk
		(chapter 2.8)	D, E, F	
		Pyrophoric liquids (chapter 2.9)	1	
		Pyrophoric solids (chapter 2.10)	1	
		Substances and mixtures which, in	1, 2, 3	
		contact with water, emit flammable gases		
		(chapter 2.12)		
		Oxidising liquids (chapter 2.13)	1, 2, 3	
		Oxidising solids (chapter 2.14)	1, 2, 3	
		Organic Peroxides (chapter 2.15)	Types A, B,	
			<u>C, D, E, F</u>	
P370	In case of fire: Evacuate area	Explosives (chapter 2.1)	Divisions 1.1,	- except if explosives are 1.4 S
+			1.2, 1.3, 1.4,	
P380			1.5	
P370	In case of fire: Evacuate area. Fight fire	Self-reactive substances and mixtures	Types A, B	
+	remotely due to the risk of explosion.	(chapter 2.8)		
P380		Organic peroxides (chapter 2.15)	Types A, B	
+				
P375				
P371	In case of major fire and large quantities:	No change.		
+ P200	Evacuate area. Fight fire remotely due to the			
P380	risk of explosion.			
+ D275				
P375				

Code	Precautionary statement	Hazard class	Hazard	Conditions for use
			category	
P401	Store	No change		
P402	Store in a dry place	No change		
P403	Store in a well-ventilated place	Flammable gases (chapter 2.2)	1, 2	
		Oxidising 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	Tyeps A, B, C,	
		mixtures (chapter 2.8)	D, E, F	
		Organic Peroxides (chapter 2.15)	Types A, B,	
			C, D, E, F	
		Acute toxicity, inhalation (chapter	1, 2, 3	- if product is volatile so as to generate a hazardous
		3.1)		atmosphere
		Specific target organ toxicity,	3	
		single exposure; respiratory tract		
		irritation (chapter 3.8)		
		Specific target organ toxicity,	3	
		single exposure; narcotic effects		
T 101	~	(chapter 3.8)		
P404	Store in a closed container			
P405	Store locked up	No change		
P406	Store in corrosive resistant/container with a resistant inner liner.	No change		
P407	Maintain air gap between pallets	No change		
P410	Protect from sunlight	Flammable aerosols (chapter 2.3)	1, 2	
		Gases under pressure (chapter 2.5)	Compressed	- To be used in countries where the likelihood exists
			gas	for the content of the receptacle to exceed 60°C if

#### **Table A3.2.4: Codification of storage precautionary statements**

Code	Precautionary statement	Hazard class	Hazard	Conditions for use
	•		category	
			Liquefied gas	the receptacle is not protected from sunshine
			Dissolved gas	
		<b>Self-reactive</b> substances and	Types A, B,	
		mixtures (chapter 2.8)	<u>C, D, E, F</u>	
		Self-heating substances and	1, 2	
		mixtures (chapter 2.11)		
ļ		Organic peroxides (chapter 2.15)	Types A, B, C, D, E, F	
P411	Store at temperatures not exceeding °C/ °F	No change		
P412	Do not expose to temperatures exceeding 50°C/122°F	No change		
P413	Store bulk masses greater thankg/lbs at temperatures not exceeding°C/°F	No change		
<u> </u>				
P420	Store away from other materials			
P422	Store contents under	No change		
D 100				
P402	Store in a dry place. Keep in a eontainer tightly closed container	Substances and mixtures which, in	1,2,3	
+ <del>P404</del>	closed container	contact with water, emit flammable		
P233		gases (chapter 2.12)		
P403	Store in a well-ventilated place. Keep in a	No change		
+	container tightly closed container.	110 change		
P233	container against crossed container.			
P403	Store in a well-ventilated place. Keep cool	Flammable liquids (chapter 2.6)	1, 2, 3, 4	
+	• •	Self-reactive substances and	Types A, B, C,	
P235		mixtures (chapter 2.8)	D, E, F	
		Organic peroxides (chapter 2.15)	Types A, B,	
			<u>C, D, E, F</u>	

#### **Table A3.2.4: Codification of storage precautionary statements**

Code	Precautionary statement	Hazard class	Hazard	Conditions for use
			category	
P410	Protect from sunlight. Store in a well-ventilated	Gases under pressure (chapter 2.5)	Compressed	- To be used in countries where the likelihood exists
+	place.		gas	for the content of the receptacle to exceed 60°C if
P403			Liquefied gas	the receptacle is not protected from sunshine
			Dissolved gas	
P410	Protect from sunlight. Do not expose to	No change		
+	temperatures exceeding 50°C/122°F			
P412				
P411	Store at temperatures not exceeding °C/ °F.	No change		
+	Keep cool.			
P235	•			

#### **Table A3.2.5 Codification of disposal precautionary statements**

Code	Precautionary statement	Hazard class	Hazard category	Conditions for use
P501	Dispose of contents/container to	No change		

#### Annex 4: Suggested changes to tables A3.2.1, A3.2.2, A3.2.3, A3.2.4 (clean copy)

#### **Table A3.2.1**

Code	Precautionary statement	Hazard class	Hazard category	Conditions for use
P101	If medical advice is needed, have product container or	As appropriate		Consumer products
	label at hand.			
P102	Keep out of reach of children	As appropriate		Consumer products
P103	Read entire label before use	As appropriate		Consumer products, and others as
				appropriate
P104	Do not use until all safety precautions have been read and	As appropriate		Consumer products, and others as
	understood.			appropriate

#### **Table A3.2.2** Codification of prevention precautionary statements

Code	Precautionary statement	Hazard class	Hazard	Conditions for use
			category	
P202	Do not handle until all safety precautions have been	Explosives (chapter 2.1)	Unstable	
	read and understood		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	Additional	
		lactation (chapter 3.7)	category	
P210	Keep away from heat/sparks/open flames/hot surfaces. – No smoking.	No change		
P211	Do not spray on an open flame or other ignition source	No change		
P220	Keep/store away from clothing//other	Oxidizing gases (chapter 2.4)	1	Manufacturer/supplier or the
	materials/combustible materials.	Self-reactive substances and mixtures	Types	competent authority to specify
		(chapter 2.8)	A, B, C, D, E, F	other incompatible materials.
		Self-heating substances and mixtures	1, 2	- 'keep' should be used when the
		(chapter 2.11)		chemical should be kept away
		Oxidizing liquids (chapter 2.13)	2, 3	from the specified materials at
		Oxidizing solids (chapter 2.14)	2,3	all times, whereas 'store' should
		Organic peroxides (chapter 2.15)	Types	be used when this precaution
			A, B, C, D, E, F	only applies to storage
		Oxidizing liquids (chapter 2.13)	1	Specify to keep away from
		Oxidizing solids (chapter 2.14)	1	clothing and other combustible materials.
P221	Do not mix with combustibles/	Oxidizing liquids (chapter 2.13)	1, 2, 3	Manufacturer/supplier or the competent authority to specify
		Oxidising solids (chapter 2.14)	1, 2, 3	other incompatible materials.
P222	Do not allow contact with air	No change		
P223	Keep away from any possible contact with water, because of violent reaction and possible flash fire	No change		

Code	Precautionary statement	Hazard class	Hazard category	Conditions for use
P230	Keep wetted with	No change		
P231	Handle under inert gas	no change		
P232	Protect from moisture	No change		
P233	Keep in a tightly closed container	Flammable liquids (chapter 2.6)	1,2,3	
		Substances and mixtures which, in	1,2,3	
		contact with water, emit flammable		
		gases (chapter 2.12)		
		Acute toxicity, inhalation (chapter 3.1)	1,2,3	-if product is volatile so as to
		Specific target organ toxicity, single	3	generate hazardous
		exposure; respiratory tract irritation		atmosphere
		(chapter 3.8)		
		Specific target organ toxicity, single	3	
		exposure; narcotic effects (chapter 3.8)		
P234	Keep only in original container	Explosives (chapter 2.1)	Unstable explosives	For explosives, self-reactive
			and Divisions 1.1,	substances and organic
			1.2, 1.3, 1.4, 1.5	peroxides repackaging may
		Self reactive substances and mixtures	Types A, B, C, D, E,	result in a different hazard
		(chapter 2.8)	F	category
		Organic Peroxides (chapter 2.15)	Types A, B, C, D, E,	
			F	
		Substances and mixtures corrosive to	1	
		metals (2.16)		
P235	Keep cool	No change		
			1	
P240	Ground/bond container and receiving equipment	Explosives (chapter 2.1)	Divisions 1.1, 1.2,	- if the explosive is
			1.3, 1.4, 1.5	electrostatically sensitive.
		Flammable liquids (chapter 2.6)	1, 2, 3	
		Flammable solids (chapter 2.7)	1, 2	- if electrostatically sensitive
				material is for reloading.

Code	Precautionary statement	Hazard class	Hazard category	Conditions for use
P241	Use explosion-proof equipment	Flammable liquids (chapter 2.6)	1, 2	manufacturer/supplier or the competent authority to specify equipment
		Flammable liquids (chapter 2.6)	3	manufacturer/supplier or the competent authority to specify equipment - if product is volatile so as to generate hazardous atmosphere.
		Flammable solids (chapter 2.7)	1, 2	manufacturer/supplier or the competent authority to specify equipment - if dust clouds can occur
P242	Use only non-sparking tools	Flammable gases (chapter 2.6)	1, 2	- if product is sensitive to
		Flammable liquids (chapter 2.6)	1, 2	mechanical sparks
		Flammable liquids (chapter 2.6)	3	- if product is volatile so as to generate hazardous atmosphere and sensitive to mechanical sparks
P243	Take precautionary measures against static discharge	Flammable liquids (chapter 2.6)	1, 2	- if material is electrostatically sensitive
		Flammable liquids (chapter 2.6)	3	- if product is volatile so as to generate hazardous atmosphere and electrostatically sensitive
P244	Keep cylinder valves and pressure regulators free from grease and oil.	Oxidizing gases (chapter 2.4)	1	
P250	Do not subject to grinding/shock/friction	No change		
P251	Pressurized container: Do not pierce or burn, even after use.	No change		

**Table A3.2.2** Codification of prevention precautionary statements (cont'd)

Code	Precautionary statement	Hazard class	Hazard category	Conditions for use
P260	Do not create/ breathe dust/fume/gas/mist/vapours/spray	Acute toxicity – inhalation (chapter 3.1)	1,2,3,4	Manufacturer/supplier or the competent authority to specify practicable precaution and applicable conditions.
		Skin corrosion (chapter 3.2)	1A, 1B, 1C	<ul><li>- specify do not breathe dusts or mists</li><li>- if inhalable particles of dusts or mists may occur during use.</li></ul>
		Respiratory sensitization (chapter 3.4)	1	Manufacturer/supplier or the
		Skin sensitization (chapter 3.4)	1	competent authority to specify practicable precaution and applicable conditions.
		Reproductive toxicity – effects on or via lactation (chapter 3.7)	Additional category	<ul><li>specify do not breathe dusts or mists</li><li>if inhalable particles of dusts or mists may occur during use</li></ul>
		Specific target organ toxicity, single exposure (chapter 3.8)	1,2	Manufacturer/supplier or the competent authority to specify
		Specific target organ toxicity, single exposure; respiratory tract irritation (chapter 3.8)	3	practicable precaution and applicable conditions.
		Specific target organ toxicity, single exposure; narcotic effects (chapter 3.8)	3	
		Specific target organ toxicity, repeated exposure (chapter 3.9)	1,2	
P262	Do not get in eyes, on skin, or on clothing	No change		
P263	Avoid contact during pregnancy/ while nursing	No change		
P264	Wash thoroughly after handling	No change		

Code	Precautionary statement	Hazard class	Hazard category	Conditions for use
P270	Do not eat/drink or smoke when using this product	No change		
P271	Use only outdoors in a well-ventilated area	No change		
P272	Contaminated work clothing should not be allowed out of	No change		
	the workplace.			
P273	Avoid release to the environment	No change		
			1	
P280	Wear protective gloves/protective clothing/eye	Explosives (chapter 2.1)	Unstable explosives,	- specify face protection
	protection/face protection/		Divisions 1.1, 1.2,	Manufacturer/supplier or the
			1.3, 1.4, 1.5	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
		Self-reactive substances and mixtures	Types A, B, C, D, E,	Manufacturer/supplier or the
		(chapter 2.8)	F	competent authority to specify
		Pyrophoric liquids (chapter 2.9)	1	type of equipment
		Pyrophoric solids (chapter 2.10)	1	
		Self-heating substances and mixtures	1, 2	
		(chapter 2.11)		
		Substances and mixtures which, in	1, 2, 3	
		contact with water, emit flammable		
		gases (chapter 2.12)	1.0.0	
		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,	- specify protective gloves and
			F	eye/face protection
				Manufacturer/supplier or the
				competent authority to specify
		A. (. (. 2.2)	1 2 2 4	type of equipment
		Acute toxicity – dermal (chapter 3.1)	1, 2, 3, 4	- specify protective
				gloves/clothing

**Table A3.2.2** Codification of prevention precautionary statements (cont'd)

Code	Precautionary statement	Hazard class	Hazard category	Conditions for use
		Skin corrosion (chapter 3.2)	1A, 1B, 1C	<ul> <li>Specify protective gloves/ clothing and eye/face protection.</li> <li>Manufacturer/supplier or the competent authority to specify type of equipment.</li> </ul>
		Skin irritation (chapter 3.2)	2	- Specify protective gloves
		Skin sensitization (chapter 3.4)	1	Manufacturer/supplier or the competent authority to specify type of equipment
		Severe eye damage (chapter 3.3)	1	- specify eye/face protection Manufacturer/supplier or the competent authority to specify type of equipment
		Eye irritation (chapter 3.3)	2A	- specify eye/face     protection  Manufacturer/supplier or the competent authority to specify type of equipment
		Germ cell mutagenicity (chapter 3.5)	1A, 1B, 2	Manufacturer/supplier or the
		Carcinogenicity (chapter 3.6)	1A, 1B, 2	competent authority to specify
		Reproductive toxicity (chapter 3.7)	1A, 1B, 2	appropriate personal protective equipment.
P282	Wear cold insulating gloves/face shield/eye protection.	No change		
P283	Wear fire/flame resistant/retardant clothing	No change		
P284	Wear respiratory protection	Acute toxicity, inhalation (chapter 3.1)	1,2	Manufacturer/supplier or the
		Respiratory sensitization (chapter 3.4)	1	competent authority to specify equipment

	·	Hazard class	Hazard	Conditions for use
P301	IF SWALLOWED:	No change	category	
	IF ON SKIN (or hair):	Flammable liquids (chapter 2.6)	1,2,3	
1 303	IF ON SKIN (or hair).	Pyrophoric liquids (chapter 2.9)	1,2,3	-
		Acute toxicity, dermal (chapter 3.1)	1,2,3,4	-
		Skin irritation (chapter 3.2)	7	-
		Skin corrosion (chapter 3.2)	1A, 1B, 1C	-
		Skin sensitization (chapter 3.4)	1A, 1B, 1C	-
P304	IF INHALED:	No change	1	
	IF IN EYES:	No change		
	IF ON CLOTHING:	No change		
	IF exposed:	No change		
	IF exposed or concerned:	Germ cell mutagenicity (chapter 3.5)	1A, 1B, 2	
1 300.	ir exposed of concerned.	Carcinogenicity (chapter 3.6)	1A, 1B, 2	-
		Reproductive toxicity (chapter 3.7)	1A, 1B, 2	-
		Reproductive toxicity (chapter 5.7)  Reproductive toxicity, effects on or via	Additional	-
		lactation (chapter 3.7		
P309	IF you feel unwell:	Specific target organ toxicity, single	category 1, 2	
F 309	ir you leef unwell:	exposure (chapter 3.8)	1, 2	
P310	Immediately call a POISON	Gases under pressure (chapter 2.5)	Refrigerated	Manufacturer/supplier or the
	CENTER/doctor/physician/	Gases under pressure (chapter 2.5)	liquefied gas	competent authority to specify
	CENTER/doctor/physician/	Acute toxicity, oral (chapter 3.1)	1,2,3	the appropriate source of
		Acute toxicity, oral (chapter 3.1)  Acute toxicity, dermal (chapter 3.1)	1,2,3	medical attention.
			1,2	The statement "Get immediate
		Acute toxicity, inhalation (chapter 3.1)		medical advice/attention" may
		Skin corrosion (chapter 3.2)	1A, 1B, 1C	be used on labels where more
		Severe eye damage (chapter 3.3)	1 1 2	than one possible source of
		Aspiration hazard (chapter 3.10)	1,2	medical attention is available.

Annex 4 (cont'd)

Code	Precautionary statement	Hazard class	Hazard	Conditions for use
			category	
P311	Call a POISON CENTER/doctor/physician/	Acute toxicity, inhalation (chapter 3.1)	3	Manufacturer/supplier or the
		Skin irritation (chapter 3.2)	2, 3	competent authority to specify
		Eye irritation (chapter 3.3)	2A, 2B	the appropriate source of medical
		Respiratory sensitisation (chapter 3.4)	1	attention.
		Skin sensitisation (chapter 3.4)	1	The statement "Get medical
		Germ cell mutagenicity (chapter 3.5)	1A, 1B, 2	advice/attention" may be used on
		Carcinogenicity (chapter 3.6)	1A, 1B, 2	labels where more than one
		Reproductive toxicity (chapter 3.7)	1A, 1B, 2	possible source of medical
		Reproductive toxicity, effects on or via	1A, 1B, 2	attention is available.
		lactation (chapter 3.7)		
		Specific target organ toxicity, single exposure (chapter 3.8)	1, 2	
P312	Call a POISON CENTER/doctor/physician/ if you feel	Acute toxicity, oral (chapter 3.1)	4	Manufacturer/supplier or the
	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 medical
		Acute toxicity, inhalation (chapter 3.1)	4	attention.
		Acute toxicity, inhalation (chapter 3.1)	5	The statement "Get medical advice/attention" may be used on labels where more than one
		Specific target organ toxicity, single exposure; respiratory tract irritation (chapter 3.8)		
		Specific target organ toxicity, single exposure; respiratory tract irritation (chapter 3.8)		possible source of medical attention is available.
		Specific target organ toxicity, repeated exposure (chapter 3.9)	1,2	

Code	Precautionary statement	Hazard class	Hazard	Conditions for use
			category	
P321	Specific treatment (see on this label)	Acute toxicity, oral (chapter 3.1)	1,2,3	
		Acute toxicity, dermal (chapter 3.1)	1,2,3,4	
		Acute toxicity, inhalation (chapter 3.1)	1,2,3	
		Skin corrosion (chapter 3.2)	1A, 1B, 1C	
		Skin irritation (chapter 3.2)	2	
		Skin sensitization (chapter 3.4)	1	
		Specific target organ toxicity, single exposure	1	
		(chapter 3.8)		
P330	Rinse mouth	No change		
P331	Do NOT induce vomiting	No change		
P333	If skin irritation or rash occurs:	Skin irritation (chapter 3.2)	2,3	
		Skin sensitisation (chapter 3.4)	1	
P334	Immerse in cool water/wrap in wet bandages	No change		
P335	Brush off loose particles from skin	No change		
P336	Thaw frosted parts with lukewarm water. Do not rub	No change		
	affected area			
P337	If eye irritation persists:	No change		
P338	Remove contact lenses, if present and easy to do.	No change		
	Continue rinsing.			
		T		
P340	Remove individual to fresh air and keep at rest in a	Acute toxicity, inhalation (chapter 3.1)	1,2,3,4	
	position comfortable for breathing	Skin corrosion (chapter 3.2)	1A, 1B, 1C	
		Specific target organ toxicity, single exposure;	3	
		respiratory tract irritation (chapter 3.8)		4
		Specific target organ toxicity, single exposure; narcotic effects (chapter 3.8)	3	
P341	If breathing is difficult, remove individual to fresh air	Respiratory sensitization (chapter 3.4)	1	
	and keep at rest in a position comfortable for breathing			

Code	Precautionary statement	Hazard class	Hazard category	Conditions for use
P351	Rinse cautiously with water for several minutes.	No change		
P352	Wash skin with plenty of water	Flammable liquids (chapter 2.6)	1,2,3	
		Acute toxicity, dermal (chapter 3.1)	1,2,3,4	
		Skin corrosion (chapter 3.2)	1A, 1B, 1C	]
		Skin irritation (chapter 3.2)	2	1
		Skin sensitization (chapter 3.4)	1	
P360	Rinse immediately contaminated clothing and skin with	Oxidizing liquids (chapter 2.13)	1	
	plenty of water before removing clothes.	Oxidizing solids (chapter 2.14)	1	
P361	Immediately take off all contaminated clothing . Wash	Flammable liquids (chapter 2.6)	1,2,3	
	before reuse	Acute toxicity, dermal (chapter 3.1)	1,2,3	7
		Skin corrosion (chapter 3.2)	1A, 1B. 1C	7
P362	Take off contaminated clothing. Wash before re-use	Acute toxicity, dermal (chapter 3.1)	4	
		Skin irritation (chapter 3.2)	2	1
		Skin sensitization (chapter 3.4)	1	
P370	In case of fire:	Explosives (chapter 2.1)	Divisions1.1,	
			1.2, 1.3, 1.4,	
			1.5	
		Oxidizing gases (chapter 2.4)	1	
		Flammable liquids (chapter 2.6)	1, 2, 3, 4	
		Flammable solids (chapter 2.7)	1, 2	
		Self-reactive substances and mixtures (chapter	Types A, B, C,	
		2.8)	D, E, F	_
		Pyrophoric liquids (chapter 2.9)	1	_
		Pyrophoric solids (chapter 2.10)	1	

Code	Precautionary statement	Hazard class	Hazard category	Conditions for use
		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	
P370	In case of fire:	No change		
P371	In case of major fire and large quantities	No change		
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
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	- except if explosives are 1.4S
P374	Fight fire with normal precautions from a reasonable distance.	Explosives (chapter 2.1)	Division 1.4	- except if explosives are 1.4S
P375	Fight fire remotely due to 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	
		Organic Peroxides (chapter 2.15)	Types A, B	
P376	Stop leak if safe to do so	No change		
P377	Leaking gas fire: Do not extinguish, unless leak can be stopped safely	No change		

Code	Precautionary statement	Hazard class	Hazard category	Conditions for use
P378	Use to extinguish	Flammable liquids (chapter 2.6)	1, 2, 3, 4	Manufacturer/supplier or the
		Flammable solids (chapter 2.7)	1, 2	competent authority to specify
		Pyrophoric liquids (chapter 2.9)	1	appropriate media
		Pyrophoric solids (chapter 2.10)	1	- if water increases risk
		Substances and mixtures which, in contact	1, 2, 3	]
		with water, emit flammable gases (chapter		
		2.12)		
		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,	- except if explosives are 1.4 S
			1.2, 1.3, 1.4,	
			1.5	
		Self-reactive substances and mixtures (chapter	Types A, B	
		2.8)		
		Oxidising liquids (chapter 2.13)	1	
		Oxidising solids (chapter 2.14)	1	
		Organic peroxides (chapter 2.15)	Types A, B	]
P381	Eliminate all ignition sources if safe to do so	No change		
P381	Eliminate all ignition sources if safe to do so	No change		
P381 P390	Eliminate all ignition sources if safe to do so  Absorb spillage to prevent material-damage	No change  No change		

Code	Precautionary statement	Hazard class	Hazard category	Conditions for use
P301	IF SWALLOWED: Immediately call a POISON	Acute toxicity, oral (chapter 3.1)	1,2,3	Manufacturer/supplier or the
+P31 0	CENTER /doctor/physician	Aspiration hazard (chapter 3.10)	1,2	competent authority to specify the appropriate source of medical attention.  The statement "Get immediate medical advice/attention" may be used on labels where more than one possible source of medical attention is available.
P301 +P31 2	IF SWALLOWED: call a POISON CENTER/doctor/physician if you feel unwell.	Acute toxicity, oral (chapter 3.1)	4	Manufacturer/supplier or the competent authority to specify the appropriate source of medical attention.  The statement "Get immediate medical advice/attention" may be used on labels where more than one possible source of medical attention is available.
P301 + P330 + P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting	No change		
P303 + P334	IF ON SKIN (or hair): Immerse in cool water/wrap in wet bandages.	No change		
P303	IF ON SKIN (or hair): wash skin with plenty of	Acute toxicity, dermal (chapter 3.1)	1,2	
+	water	Acute toxicity, dermal (chapter 3.1)	3,4	_
P352		Skin irritation (chapter 3.2)	2	_
		Skin sensitization (chapter 3.4)	1	

# **Table A3.2.3 Codification of response precautionary statements** (cont'd)

Code	Precautionary statement	Hazard class	Hazard category	Conditions for use
P303 +	IF ON SKIN (or hair): Take off immediately all contaminated clothing Wash skin with plenty of water	Flammable liquids (chapter 2.6)	1,2,3	
P361 + P352		Skin corrosion (chapter 3.2)	1A, 1B, 1C	
P304 + P312	IF INHALED: Call a POISON CENTER/doctor/physician if you feel unwell.	Acute toxicity, inhalation (chapter 3.1)	5	Manufacturer/supplier or the competent authority to specify the appropriate source of medical attention.
				The statement "Get immediate medical advice/attention" may be used on labels where more than one possible source of medical attention is available.
P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.	No change		
P304 + P341 + P311	IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER/doctor/physician/	Respiratory sensitisation (chapter 3.4)	1	
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.	No change.		

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Code	Precautionary statement	Hazard class	Hazard	Conditions for use
P306 + P360	IF ON CLOTHING: Rinse immediately contaminated clothing and skin with plenty of water before removing clothes.	No change.	category	
P308 + P313 P309 +	If exposed or concerned: call a POISON CENTRE/doctor/physician/  If exposed or you feel unwell: call a POISON CENTER or doctor/physician.	Germ cell mutagenicity (chapter 3.5)  Carcinogenicity (chapter 3.6)  Reproductive toxicity (chapter 3.7)  Reproductive toxicity, effects on or via lactation (chapter 3.7)  Specific target organ toxicity, single exposure (chapter 3.8)	1A, 1B, 2 1A, 1B, 2 1A, 1B, 1 Additional category	Manufacturer/supplier or the competent authority to specify the appropriate source of medical attention.  The statement "Get immediate medical advice/attention" may be used on labels where more than one possible source of medical attention is available.
P311	or doctor/physician.	(Chapter 5.0)		
P333 + P313	If skin irritation or rash occurs: Call a POISON CENTER/doctor/physician	Skin irritation (chapter 3.2) Skin sensitisation (chapter 3.4)	2,3	Manufacturer/supplier or the competent authority to specify the appropriate source of medical attention.  The statement "Get immediate medical advice/attention" may be used on labels where more than one possible source of medical attention is available.
P335 + P334	Brush off loose particles from skin. Immerse in cool water/wrap in wet bandages.	No change.		

# **Table A3.2.3 Codification of response precautionary statements** (cont'd)

Code	Precautionary statement	Hazard class	Hazard category	Conditions for use	
P337 + P313	If eye irritation persists: Call a POISON CENTER/doctor/physician	Eye irritation (chapter 3.3)	2A, 2B	Manufacturer/supplier or the competent authority to specify the appropriate source of medical attention.  The statement "Get immediate medical advice/attention" may be used on labels where more than one possible source of medical attention is available.	
P370 + P376	In case of fire: Stop leak if safe to do so.	No change			
P370	In case of fire: Use for extinction	Flammable liquids (chapter 2.6)	1, 2, 3, 4	Manufacturer/supplier to	1
+		Flammable solids (chapter 2.7)	1, 2	specify appropriate media.	
P378		Pyrophoric liquids (chapter 2.9)	1	- if water increases risk	
		Pyrophoric solids (chapter 2.10)	1		
		Substances and mixtures which, in contact with water, emit flammable gases (chapter 2.12)	1, 2, 3		Ailliex
		Oxidising liquids (chapter 2.13)	1, 2, 3		4
		Oxidising solids (chapter 2.14)	1, 2, 3		
		Organic Peroxides (chapter 2.15)	Types A, B, C, D, E, F		
P370 + P380	In case of fire: Evacuate area	Explosives (chapter 2.1)	Divisions 1.1, 1.2, 1.3, 1.4, 1.5	- except if explosives are 1.4 S	

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Code	Precautionary statement	Hazard class	Hazard	Conditions for use
			category	
P370	In case of fire: Evacuate area. Fight fire remotely due	Self-reactive substances and mixtures (chapter	Types A, B	
+	to the risk of explosion.	2.8)		
P380		Organic peroxides (chapter 2.15)	Types A, B	
+				
P375				
P371	In case of major fire and large quantities: Evacuate	No change.		
+	area. Fight fire remotely due to the risk of explosion.			
P380				
+				
P375				

# **Table A3.2.4 Codification of Storage precautionary statements**

Code	Precautionary statement	Hazard class	Hazard category	Conditions for use	
P401	Store	No change	category		-
P402	Store in a dry place	No change			-
P403	Store in a well-ventilated place	Flammable gases (chapter 2.2)	1, 2		-
	Part - Land - Carlotte - Part	Oxidising gases (chapter 2.4)	1		
		Gases under pressure (chapter 2.5)	Compressed gas		
		1	Liquefied gas		
			Refrigerated		
		_	liquefied gas		
			Dissolved gas		
		Flammable liquids (chapter 2.6)	1, 2, 3, 4		
		Self-reactive substances and mixtures	Tyeps A, B, C,		
		(chapter 2.8)	D, E, F		
		Organic Peroxides (chapter 2.15)	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	3	generate a hazardous	
		exposure; respiratory tract irritation (chapter		atmosphere	
		3.8)			
		Specific target organ toxicity, single	3		
		exposure; narcotic effects (chapter 3.8)			
P403	Store in a well-ventilated place	No change			
P405	Store locked up	No change			
P406	Store in corrosive resistant/container with a resistant	No change			
	inner liner.				
P407	Maintain air gap between pallets	No change			

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# **Table A3.2.4 Codification of Storage precautionary statements**

Code	Precautionary statement	Hazard class	Hazard category	Conditions for use
P410	Protect from sunlight	Flammable aerosols (chapter 2.3)	1, 2	
		Gases under pressure (chapter 2.5)	Compressed gas	- To be used in countries where
			Liquefied gas	the likelihood exists for the
			Dissolved gas	content of the receptacle to
				exceed 60°C if the receptacle is not protected from sunshine
		Self-reactive substances and mixtures	Types A, B, C,	
		(chapter 2.8)	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	
P411	Store at temperatures not exceeding °C/ °F			
P413	Store bulk masses greater thankg/lbs at temperatures not exceeding°C/°F	No change		
P422	Store contents under	No change		
P402	Store in a dry place. Keep in a tightly closed container	Substances and mixtures which, in contact	1,2,3	
+		with water, emit flammable gases (chapter		
P233		2.12)		
P403	Store in a well-ventilated place. Keep in a tightly closed	No change		
+ D222	container.			
P233	Stone in a wall wantilated place. Veen seel	Elemmoble liquide (shorter 2.6)	1 2 2 4	
P403 +	Store in a well-ventilated place. Keep cool	Flammable liquids (chapter 2.6) Self-reactive substances and mixtures	1, 2, 3, 4 Types A, B, C,	1
P235		(chapter 2.8)	D, E, F	
1 233		Organic peroxides (chapter 2.15)	Types A, B, C,	
		Organic peroxides (chapter 2.13)	D, E, F	

#### **Table A3.2.4 Codification of Storage precautionary statements**

Code	Precautionary statement	Hazard class	Hazard	Conditions for use
			category	
P410 +	Protect from sunlight. Store in a well-ventilated place.	Gases under pressure (chapter 2.5)	Compressed gas	- To be used in countries where the likelihood exists for the
P403			Liquefied gas	content of the receptacle to exceed 60°C if the receptacle is
			Dissolved gas	not protected from sunshine
P410	<b>Protect from sunlight.</b> Do not expose to temperatures	No change		
+	exceeding 50°C/122°F			
P412	-			
P411	Store at temperatures not exceeding °C/ °F Keep	No change		
+	cool.			
P235				

#### **Table A3.2.5 Codification of disposal precautionary statements**

P501 Dispose of contents/container to	No change		
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#### Annex 5:

Changes to A3.3.5 tables – marked up

# EXPLOSIVES (CHAPTER 2.1)

Symbol

Exploding bomb



Hazard category Signal word Hazard statement

Unstable explosive Danger H200 Unstable explosive

Precautionary statements				
Prevention	Response	Storage	Disposal	
P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood.  P234 Keep only in original container - repackaging may result in a different hazard category P281 Use personal protective equipment as required. P280 Wear face protection Manufacturer/supplier or the competent authority to specify type of equipment.	P372 Explosion risk in case of fire except if explosives are 1.4S P373 DO NOT fight fire when fire reaches explosives except if explosives are 1.4S P380 Evacuate area.	P401 Storein accordance with local/regional/ national/international regulations (to be specified).	P501  Dispose of contents/container toin accordance with local/regional/ national/international regulations (to be specified).	

# EXPLOSIVES (CHAPTER 2.1)

**Symbol** Exploding bomb

Hazard category	Signal word	Hazard staten	nent
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 stat	ements	
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). P230 Keep wetted with Manufacturer/supplier or the competent authority to specify appropriate material if drying out increases explosion hazard, except as	P370 + P380 In case of fire: evacuate area.  - except if explosives are 1.4S P372 Explosion risk in case of fire.  - except if explosives are 1.4S P373 DO NOT fight fire when fire reaches explosives.  - except if explosives are 1.4S	P401 Storein accordance with local/regional/national/international regulations (to be specified).	P501  Dispose of contents/container to in accordance with local/ regional/national/international regulations (to be specified).
needed for manufacturing or operating processes (e.g. nitrocellulose).  P234  Keep only in original container - repackaging may result in a different hazard category  P240			
Ground/bond container and receiving equipment.  - if the explosive is electrostatically sensitive. P250  Do not subject to grinding/shock//frictionManufacturer/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.			

Signal word

Hazard statement

Warning H204 Fire or projection hazard



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).  P234  Keep only in original container  - repackaging may result in a different hazard category  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.	P370+P380 In case of fire: Evacuate area.  - except if explosives are 1.4S 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 except if explosives are 1.4S P374 Fight fire with normal precautions from a reasonable distance Except if explosives are 1.4S AMMUNITION AND COMPONENTS THEREOF.	P401 Storein accordance with local/regional/ national/international regulations (to be specified).	Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified).	

# EXPLOSIVES (CHAPTER 2.1)

**Symbol**No symbol

Hazard category Signal word Hazard statement

Division 1.5 Danger H205 May mass explode in fire

Precautionary statements				
Prevention	Response	Storage	Disposal	
P210 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).  P234 Keep only in original container - repackaging may result in a different hazard category  P240 Ground/bond container and receiving equipment - if the explosive is electrostatically sensitive. P250 Do not subject to grinding/shock//frictionManufacturer/supplier or the competent authority to specify applicable rough handling. P280 Wear face protection. Manufacturer/supplier or competent authority to specify type of equipment.	P370 + P380 In case of fire: Evacuate area.  - except if explosives are 1.4S P372 Explosion risk in case of fire.  - except if explosives are 1.4S P373 DO NOT fight fire when fire reaches explosives.  - except if explosives are 1.4S	P401 Storein accordance with local/regional/ national/international regulations (to be specified).	P501 Dispose of contents/container to in accordance with local/regional/ national/international regulations (to be specified).	

# FLAMMABLE GASES (CHAPTER 2.2)

Symbol Flame

Hazard category

Signal word

Hazard statement

1

Danger H220 Extremely flammable gas



Precautionary statements			
Prevention	Response	Storage	Disposal
P210	P377	P403	
Keep away from heat/sparks/open flames/hot	Leaking gas fire:	Store in well-ventilated place.	
surfacesNo smoking.	Do not extinguish, unless leak can be		
Manufacturer/supplier or competent authority to	stopped safely.		
specify applicable ignition source(s).	P381		
<u>P242</u>	Eliminate all ignition sources if safe to do		
Use only non-sparking tools	so.		
- if product is sensitive to mechanical sparks			

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# FLAMMABLE GASES (CHAPTER 2.2)

Symbol No symbol

Hazard category Signal word Hazard statement

Warning H221 Flammable 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). P242 Use only non-sparking tools - if product is sensitive to mechanical sparks	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

2 Warning H223 Flammable aerosol



Precautionary statements			
Prevention	Response	Storage	Disposal
P210		P410 + P412	
Keep away from heat/sparks/open flames/hot		Protect from sunlight. Keep/store at	
surfacesNo smoking.		temperatures not exceeding 50 °C/122 °F.	
Manufacturer/supplier or the competent authority to specify applicable ignition sources(s).			
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)

Hazard statement

**Symbol** Flame over circle

Hazard category Signal word

Danger H270 May cause or in

May cause or intensify fire; oxidizer

$\Box$	

Precautionary statements			
Prevention	Response	Storage	Disposal
P220	P370 + P376	P403	
Keep/Store away from clothing//combustible materialsManufacturer/supplier or the competent authority to specify other incompatible materials.	In case of fire: Stop leak if safe to do so.	Store in well-ventilated place.	
- 'keep' should be used when the chemical should be kept away from the specified materials at all times, whereas 'store' should be used when this precaution only applies to			
storage P244 Keep cylinder valves and pressure regulators free from grease and oil.			

#### 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



6	2			
Precautionary statements				
Prevention	Response	Storage	Disposal	
		P410 + P403 Protect from sunlight. Store in a well-ventilated place To be used in countries where the likelihood exists for the content of the receptacle to exceed 60°C if the receptacle is not protected from sunshine		

# 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 P310 Immediately call a POISON CENTER/doctor/physician Manufacturer/supplier or the competent authority to specify the appropriate source of medical attention.  The statement "Get immediate medical advice/attention" may be used on labels where more than one possible source of medical attention is available.	P403 Store in well-ventilated place.	

# FLAMMABLE LIQUIDS (CHAPTER 2.6)

Symbol Flame

Hazard category Signal word Hazard statement

Danger H224 Extremely flammable liquid and vapour Danger H225 Highly 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 in a container tightly closed container.  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 equipment.  P242  Use only non-sparking tools  if product is sensitive to mechanical sparks  P243  Take precautionary measures against static discharge.  if material is electrostatically sensitive  P280  Wear protective gloves/eye protection/face protection  Manufacturer/supplier or the competent authority to specify type of equipment.	P303 + P361 + P353-P352  IF ON SKIN (or hair): Remove/Immediately Ttake off immediately all contaminated clothing . Wash before reuse. Rinse skin with water/shower. Wash skin with plenty of soap and water 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 LIQUIDS (CHAPTER 2.6)

Symbol Flame

Hazard category

Signal word

Warning

Hazard statement

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 in a container tightly closed container.  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 equipment.  - if product is volatile so as to generate hazardous atmosphere  P242  Use only non-sparking tools.  - if product is volatile so as to generate hazardous atmosphere and sensitive to mechanical sparks  P243  Take precautionary measures against static discharge.  - if product is volatile so as to generate hazardous atmosphere and electrostatically sensitive  P280  Wear protective gloves/eye protection/face protection  Manufacturer/supplier or the competent authority to specify type of equipment.	P303 + P361 + P353-P352  IF ON SKIN (or hair):  Remove/Immediately Ttake off immediately all contaminated clothing . Wash before reuse. Rinse skin with water/shower. Wash skin with plenty of soap and water 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 LIQUIDS (CHAPTER 2.6)

Symbol No symbol

Hazard category Signal word

Hazard statement

Warning H227 Combustible liquid

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

# FLAMMABLE LIQUIDS (CHAPTER 2.6)

Symbol		
No symbol		

Hazard category Signal word Hazard statement

4 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 flames/hot	In case of fire: Use for extinction		
surfaces No smoking.	Manufacturer/supplier or the competent		
Manufacturer/supplier or the competent authority to	authority to specify appropriate media.		
specify applicable ignition 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 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	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.  - 'keep' should be used when the chemical should be kept away from the specified materials at all times, whereas 'store' should be used when this precaution only applies to storage  - P234 Keep only in original container.  - repackaging may result in a different hazard category 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. P410 Protect from sunlight 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/internation al regulations (to be specified).

# SELF-REACTIVE SUBSTANCES AND MIXTURES (CHAPTER 2.8)

**Hazard statement** 

Heating may cause a fire or explosion

H241

Hazard category

Type B

Signal word

Danger

Symbol

Exploding bomb and flame

exploding bomb an





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.  - repackaging may result in a different hazard category 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.  P410  Protect from sunlight 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 toin 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	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

Type F Warning		may cause a fire			
Precautionary statements					
Prevention Response Storage					
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 repackaging may result in a different hazard category 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.  P410  Protect from sunlight 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 toin accordance with local/regional/national/international regulations (to be specified).		

#### PYROPHORIC LIQUIDS (CHAPTER 2.9)

Symbol Flame

Hazard category

Signal word

**Hazard statement** 

1

Danger

H250 Catches fire spontaneously if exposed to air



Precautionary statements			
Prevention	Response	Storage	Disposal
P210 Keep away from heat/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. P422 Store contents underManufacturer/supplier or the competent authority to specify appropriate liquid or inert gas. P280 Wear protective gloves/eye protection/face protection. Manufacturer/supplier or the competent authority to specify type of equipment.	P302 + P334  IF ON SKIN (or hair): 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.	8tore contents under Manufacturer/supplier or the competent authority to specify appropriate liquid or inert gas.	

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#### PYROPHORIC SOLIDS (CHAPTER 2.10)

Symbol Flame

Hazard category

surfaces. - No smoking.

P210

P222

P280

protection

Signal word

**Hazard statement** 

specify applicable ignition source(s).

specify appropriate liquid or inert gas.

Wear protective gloves/eye protection/face

Manufacturer/supplier or the competent authority to

Do not allow contact with air.

P422 Store contents under...

specify type of equipment.

Prevention

Keep away from heat/sparks/open flames/hot

Manufacturer/supplier or the competent authority to

...Manufacturer/supplier or the competent authority to

Danger

Catches fire spontaneously if exposed to air H250

Precautionary statements		
Response	Storage	Disposal
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.	P422 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.  P220  Keep/store away from clothing//other materials/combustible materials.  Manufacturer/supplier or the competent authority to specify other incompatible materials.  - 'keep' should be used when the chemical should be kept away from the specified materials at all times, whereas 'store' should be used when this precaution applies to storage		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

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	
Keep away from any possible contact with water, because of violent reaction and possible flash fire.  P231 + P232  Handle under inert gas. Protect from moisture.  P233  Keep in a container tightly closed container  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 and 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.	P402 + P404-P233 Store in a dry place. Store in a closed container. Keep in a tightly closed container.	P501 Dispose of contents/container toin accordance with 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** 

3 Warning H261 In contact with water releases flammable gas



Precautionary statements				
Prevention	Response	Storage	Disposal	
P231 + P232  Handle under inert gas. Protect from moisture.  P233  Keep in a container tightly closed 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.	P402 + P404 P233 Store in a dry place. Store in a closed container. Keep in a tightly closed container.	P501 Dispose of contents/container to in accordance with local/regional/national/internation al 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/ Do not mix with combustibles/ Manufacturer/supplier or the competent authority to specify other incompatible materials. P280 Wear protective gloves /eye protection/face protection/ specify fire/ flame resistant/retardant clothing 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 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 3 May intensify fire; oxidizer H272 Warning

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.	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).
- 'keep' should be used when the chemical should be kept away from the specified materials at all times, whereas 'store' should be used only when this precaution only applies to storage			
P221  Take any precaution to avoid mixing with eombustibles/ Do not mix with combustibles/  Manufacturer/supplier or the competent authority to specify other incompatible materials.			
P280 Wear protective gloves /eye protection/face protection/ specify fire/ flame resistant/retardant clothing			

#### OXIDIZING SOLIDS (CHAPTER 2.14)

Symbol

Flame over circle

#### Hazard category

#### Signal word

#### **Hazard statement**

Danger

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/ specify fire/ flame resistant/retardant clothing 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** 

May intensify fire; oxidizer Danger

May intensify fire; oxidizer 3 Warning H272

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	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 to in accordance with local/regional/national/international regulations (to be specified).
<ul> <li>combustibles/ Do not mix with combustibles/</li> <li> Manufacturer/supplier or the competent authority to specify other incompatible materials.</li> <li>- 'keep' should be used where temperature should</li> </ul>			
never be exceeded  - 'store' should be used where temperature should only not be exceeded in storage.			
P280 Wear protective gloves /eye protection/face protection/ specify fire/ flame resistant/retardant clothing			

#### ORGANIC PEROXIDES (CHAPTER 2.15)

Symbol Exploding bomb

#### Hazard category Signal word **Hazard statement**

Type A Danger H240 Heating may cause an explosion

Precautionary statements				
Prevention	Response	Storage	Disposal	
P210 Keep away from heat/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.  - 'keep' should be used when the chemical should be kept away from the specified materials at all times, whereas 'store' should be used when this precaution only applies to storage  P234 Keep only in original container.  - repackaging may result in a different hazard category P280 Wear protective gloves/eye protection/face protection.	P370 + P378 In case of fire: Use for extinction Manufacturer/supplier 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.	P411 + P235  Store at temperatures not exceeding°C/°F. Keep cool Manufacturer/supplier or the competent authority to specify temperature.  P403 + P235  Store in a well-ventilated place. Keep cool 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).	
Manufacturer/supplier or the competent authority to specify type of equipment.				

# 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.	P370 + P378 In case of fire: Use for extinction Manufacturer/supplier 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.	P411 + P235  Store at temperatures not exceeding°C/°F. Keep cool.  Manufacturer/supplier or the competent authority to specify temperature.  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).
P234 <b>Keep only in original container.</b>		P410 Protect from sunlight.	
- repackaging may result in a different hazard category P280		P420 Store away from other materials.	
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). P220 Keep/Store away from clothing// combustible materials Manufacturer/supplier or the competent authority to specify incompatible materials.  P234 Keep only in original container repackaging may result in a different hazard category 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 to specify appropriate media.  - if water increases risk	P411 + P235 Store at temperatures not exceeding°C/°F. Keep cool Manufacturer/supplier or the competent authority to specify temperature.  P403 + P235 Store in a well-ventilated place. Keep cool P410 Protect from sunlight. P420 Store away from other materials.	P501 Dispose of contents/container to in accordance with local/regional/national/internation al regulations (to be specified).	

# CORROSIVE TO METALS (CHAPTER 2.16)

Symbol

Corrosion

Hazard category

Signal word

**Hazard statement** 

1

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.	

# ACUTE TOXICITY - ORAL (CHAPTER 3.1)

Symbol

Skull and crossbones

Hazard category Signal word Hazard statement

2

Danger H300 Fatal if swallowed

Danger H300 Fatal if swallowed



Precautionary statements				
Prevention	Response	Storage	Disposal	
P264 Washthoroughly after handling Manufacturer/supplier or the competent authority to specify parts of the body to be washed after handling. P270 Do not eat, drink or smoke when using this product.	P301 + P310  IF SWALLOWED: Immediately call a POISON CENTER/or doctor/physician/  Manufacturer/supplier or the competent authority to specify the appropriate source of medical attention.  The statement "Get immediate medical advice/attention" may be used on labels where more than one possible source of medical attention is available.  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/internatio nal regulations (to be specified).	

#### **ACUTE TOXICITY - ORAL (CHAPTER 3.1)**

Symbol

Skull and crossbones

#### Hazard category Signal word **Hazard statement**

3 Danger Toxic if swallowed H301

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 medical attention.  The statement "Get immediate medical advice/attention" may be used on labels where more than one possible source of medical attention is available.  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.	Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified).	

# ACUTE TOXICITY - ORAL (CHAPTER 3.1)

**Hazard statement** 

**Symbol** Exclamation mark

Hazard category Signal word

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 medical attention.  The statement "Get medical advice/attention if you feel unwell" may be used on labels where more than one possible source of medical attention is available.  P330  Rinse mouth.		P501 Dispose of contents/container to in accordance with local/regional/national/internation al regulations (to be specified).	

# ACUTE TOXICITY - ORAL (CHAPTER 3.1)

Symbol

No symbol

Hazard category Signal word Hazard statement

5 Warning H303 May be harmful if swallowed

Precautionary statements			
Prevention	Storage	Disposal	
	P312 Call a POISON CENTER/doctor/physician/ if you feel unwell.  Manufacturer/supplier or the competent authority to specify the appropriate source of medical attention.		
	The statement "Get medical advice/attention if you feel unwell"  may be used on labels where more than one possible source of medical attention is available.		

# ACUTE TOXICITY - DERMAL (CHAPTER 3.1)

**Symbol**Skull and crossbones

 $\overline{\bigcirc}$ 

Hazard category Signal word Hazard statement

Danger H310 Fatal in contact with skin

Danger H310 Fatal in contact with skin

Precautionary statements			
Prevention	Response	Storage	Disposal
P262 Do not get in eyes, on skin, or on clothing. P264 Wash thoroughly after handling Manufacturer/supplier or the competent authority to specify parts of the body to be washed after handling. P270 Do not eat, drink or smoke when using this product. P280 Wear protective gloves/protective clothing. Manufacturer/supplier or the competent authority to specify type of equipment.	P302 + P350 + P352 IF ON SKIN (or hair): Gently wash with plenty of soap and water. Wash skin with plenty of soap and water. P310 Immediately call a POISON CENTER/or doctor/physician/ Manufacturer/supplier or the competent authority to specify the appropriate source of medical attention.  The statement "Get immediate medical advice/attention" may be used on labels where more than one possible source of medical attention is available. P322 Specific measures (see on this label) P321 Specific treatment (see on this label) Reference to supplemental first aid instruction if immediate measures such as specific cleansing agent is advised. P361 Remove Immediately Ttake off immediately all contaminated clothing . Wash before reuse.  P363 Wash contaminated clothing before reuse.	P405 Store locked up.	P501  Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified).

# ACUTE TOXICITY - DERMAL (CHAPTER 3.1)

Symbol

Skull and crossbones

Signal word Hazard statement

Danger H311 Toxic in contact with skin

**Hazard category** 

3



	Precautionary statements			
Prevention	Response	Storage	Disposal	
P280 Wear protective gloves/protective clothing. Manufacturer/supplier or the competent authority to specify type of equipment.	P302 + P352  IF ON SKIN (or hair): Wash skin with plenty of soap and water.  P312  Call a POISON CENTRE/or doctor/physician/ if you feel unwell.  Manufacturer/supplier or the competent authority to specify the appropriate source of medical attention.	P405 Store locked up.	P501  Dispose of contents/container to  in accordance with local/regional/national/internatio nal regulations (to be specified).	
	The statement "Get medical advice/attention if you feel unwell" may be used on labels where more than one possible source of medical attention is available.  P322  Specific measures (see on this label) P321			
	Specific treatment (see on this label) Reference to supplemental first aid instruction if measures such as specific cleansing agent is advised.  P361 Remove Immediately Ttake off immediately all contaminated clothing . Wash before reuse.  P363 Wash contaminated clothing before reuse.			

# ACUTE TOXICITY - DERMAL (CHAPTER 3.1)

**Symbol** Exclamation mark

Hazard category

Signal word

**Hazard statement** 

4

Warning

H312 Harmful in contact with skin



Precautionary statements			
Prevention	Response	Storage	Disposal
Wear protective gloves/protective clothing Manufacturer/supplier or the competent authority to specify type of equipment.	P302 + P352 IF ON SKIN (or hair): Wash skin with plenty of soap and water. P312 Call a POISON CENTER/or doctor/physician/ if you feel unwell.  Manufacturer/supplier or the competent authority to specify the appropriate source of medical attention.  The statement "Get medical advice/attention if you feel unwell" may be used on labels where more than one possible source of medical attention is available. P322 Specific measures (see on this label) P321 Specific treatment (see on this label) Reference to supplemental first aid instruction if measures such as specific cleansing agent is advised. P362 Take off all contaminated clothing. Wash before re-use P363 Wash contaminated clothing before reuse.		Dispose of contents/container to in accordance with local/regional/national/internatio nal regulations (to be specified).

#### **ACUTE TOXICITY - DERMAL** (**CHAPTER 3.1**)

Symbol

No symbol

Hazard category Signal word **Hazard statement** 

5 Warning May be harmful in contact with skin H313

Precautionary statements			
Prevention	Response	Storage	Disposal
	P312 Call a POISON CENTER/OF doctor/physician/ if you feel unwell.  Manufacturer/supplier or the competent authority to specify the appropriate source of medical attention.  The statement "Get medical advice/attention if you feel unwell" may be used on labels where more than one possible source of medical attention is available.		

# ACUTE TOXICITY - INHALATION (CHAPTER 3.1)

Symbol

Skull and crossbones



Hazard category Signal word Hazard statement

Danger H330 Fatal if inhaled
Danger H330 Fatal if inhaled

Precautionary statements				
Prevention	Response	Storage	Disposal	
P260 Do not create/breathe dust/fume/gas/mist/vapours/spray.  Manufacturer/supplier or the competent authority to specify practicable precaution and applicable conditions.  P271 Use only outdoors or in a well-ventilated area.  P284 Wear respiratory protection.  Manufacturer/supplier or the competent authority to specify equipment.	P304 + P340  IF INHALED: Remove victim-individual to fresh air and keep at rest in a position comfortable for breathing.  P310  Immediately call a POISON CENTER/ordoctor/physician/  Manufacturer/supplier or the competent authority to specify the appropriate source of medical attention.  The statement "Get immediate medical advice/attention" may be used on labels where more than one possible source of medical attention is available.  P320  Specific treatment is urgent (see on this label)  P321  Specific treatment (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 in a container tightly closed container.  - if product is volatile 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).	

# ACUTE TOXICITY - INHALATION (CHAPTER 3.1)

Symbol

Skull and crossbones

 $\overline{}$ 

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.  P260 Do not create/breathe dust/fume gas/mist/vapours/spray Manufacturer/supplier or the competent authority to specify practicable precaution and applicable conditions.  P271 Use only outdoors or in a well-ventilated area.	P304 + P340  IF INHALED: Remove victim individual to fresh air and keep at rest in a position comfortable for breathing.  P311  Call a POISON CENTER/or doctor/physician.  Manufacturer/supplier or the competent authority to specify the appropriate source of medical attention.  The statement "Get medical advice/attention" may be used on labels where more than one possible source of medical attention is available.  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 in a container tightly closed container.  - if product is volatile so as to generate hazardous atmosphere. P405 Store locked up.	P501  Dispose of content/container to in accordance with local/regional/national/international regulations (to be specified).	

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# 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
P261 Avoid breathing dust/fume/gas/mist/ vapours/spray.  P260 Do not create/breathe dust/fume gas/mist/vapours/spray Manufacturer/supplier or the competent authority to specify practicable precaution and applicable conditions. P271 Use only outdoors or in a well-ventilated area.	P304 + P340  IF INHALED: Remove victim individual to fresh air and keep at rest in a position 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 medical attention.  The statement "Get medical advice/attention if you feel unwell" may be used on labels where more than one possible source of medical attention is available.		

#### **ACUTE TOXICITY - INHALATION** (**CHAPTER 3.1**)

Symbol

No symbol

Signal word **Hazard statement** 

Warning May be harmful if inhaled 5 H333

Precautionary statements			
Prevention	Response	Storage	Disposal
	P304 + P312  IF INHALED: Call a POISON CENTER/ordoctor/physician/ if you feel unwell.		
	Manufacturer/supplier or the competent authority to specify the appropriate source of medical attention.		
	The statement "Get medical advice/attention if you feel unwell" may be used on labels where more than one possible source of medical attention is available.		

#### 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 P352  IF ON SKIN (or hair): Remove Immediately Ttake off immediately all contaminated clothing . Wash before reuse. Rinse skin with water/shower. Wash skin with plenty of soap and water.  P363  Wash contaminated clothing before reuse.  P304 + P340  IF INHALED: Remove victim individual to fresh air and keep at rest in a position comfortable for breathing.  P310  Immediately call a POISON CENTER/doctor/physician/  Manufacturer/supplier or the competent authority to specify the appropriate source of medical attention.  The statement "Get immediate medical advice/attention" may be used on labels where more than one possible source of medical attention is available.  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/internationa l regulations (to be specified).			

# SKIN CORROSION/IRRITATION (CHAPTER 3.2)

Symbol

Exclamation mark

Hazard category

Signal word

**Hazard statement** 

2

Warning

H315 Causes skin irritation



Precautionary statements					
Prevention	Response	Storage	Disposal		
P264 Wash thoroughly after handling Manufacturer/supplier or the competent authority to specify parts of the body to be washed after handling. P280 Wear protective gloves. Manufacturer/supplier or the competent authority to specify type of equipment.	P302 + P352  IF ON SKIN (or hair): Wash skin with plenty of soap and water.  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.  P333 + P311  If skin irritation or rash occurs: Call a POISON CENTER/doctor/physician/  Manufacturer/supplier or the competent authority to specify the appropriate source of medical attention.  The statement "Get medical advice/attention" may be used on labels where more than one possible source of medical attention is available.  P362  Take off contaminated clothing . Wash before reuse.				

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# SKIN CORROSION/IRRITATION (CHAPTER 3.2)

**Hazard statement** 

**Symbol**No symbol

Hazard category Signal word

Warning H316 Causes mild skin irritation

Precautionary statements				
Prevention	Response	Storage	Disposal	
	P332 + P313  If skin irritation occurs: Get medical advice/attention.			
	<u>P333</u> + <u>P311</u>			
	If skin irritation or rash occurs: Call a POISON CENTER/doctor/physician/			
	Manufacturer/supplier or the competent authority to specify the appropriate source of medical attention.			
	The statement "Get medical advice/attention" may be used on labels where more than one possible source of medical attention is available.			

#### 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/doctor/physician/				
	Manufacturer/supplier or the competent authority to specify the appropriate source of medical attention.  The statement "Get immediate medical advice/attention" may be used on labels where more than one possible source of medical attention is available.				

#### EYE DAMAGE/IRRITATION (CHAPTER 3.3)

**Symbol** Exclamation mark

Hazard category

Prevention

... Manufacturer/supplier or the competent authority to

specify parts of the body to be washed after handling.

Manufacturer/supplier or the competent authority to

Wash ... thoroughly after handling.

Wear eve protection/face protection.

specify type of equipment.

Signal word

**Hazard statement** 

The statement "Get medical advice/attention" may be used on labels where more than one possible source of medical attention is

available.

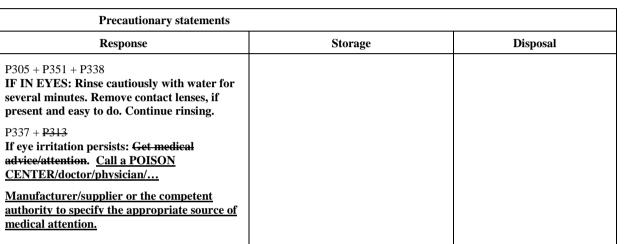
2A

P264

P280

Warning

H319 Causes serious eye irritation



### EYE DAMAGE/IRRITATION (CHAPTER 3.3)

Symbol No symbol

Signal word Hazard category **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. Call a POISON CENTER/doctor/physician/		
	Manufacturer/supplier or the competent authority to specify the appropriate source of medical attention.		
	The statement "Get medical advice/attention" may be used on labels where more than one possible source of medical attention is available.		

# 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. P260 Do not create/breathe dust/fume gas/mist/vapours/spray Manufacturer/supplier or the competent authority to specify practicable precaution and applicable conditions. P284 Wear respiratory protection Manufacturer/supplier or the competent authority to specify equipment P285 In case of inadequate ventilation wear respiratory protection. Manufacturer/supplier or the competent authority to specify equipment	P304 + P341  IF INHALED: If breathing is difficult, remove victim individual to fresh air and keep at rest in a position 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 medical attention.  The statement "Get medical advice/attention" may be used on labels where more than one possible source of medical attention is available.		P501 Dispose of contents/container to in accordance with local/regional/national/internation al regulations (to be specified).	

### SENSITIZATION - SKIN (CHAPTER 3.4)

**Hazard statement** 

Symbol

Exclamation mark

Hazard category Signal word

Warning

1, 1A, 1B

H317 May cause an allergic skin reaction



Precautionary statements			
Prevention	Response	Storage	Disposal
P261 Avoid breathing dust/fume/gas/mist/ vapours/spray. P260 Do not create/breathe dust/fume gas/mist/vapours/spray Manufacturer/supplier or the competent authority to specify practicable precaution and applicable conditions. P272 Contaminated work clothing should not be allowed out of the workplace. P280 Wear protective gloves. Manufacturer/supplier or the competent authority to specify type of equipment.	P302 + P352  IF ON SKIN (or hair): Wash skin with plenty of soap and water.  P333 + P313 + P311  If skin irritation or rash occurs: Get medical advice/attention. Call a POISON CENTER/doctor/physician/  Manufacturer/supplier or the competent authority to specify the appropriate source of medical attention.  The statement "Get medical advice/attention" may be used on labels where more than one possible source of medical attention is available.  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  Take off all contaminated clothing. Wash before re-use  P363  Wash contaminated clothing before reuse.		P501 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

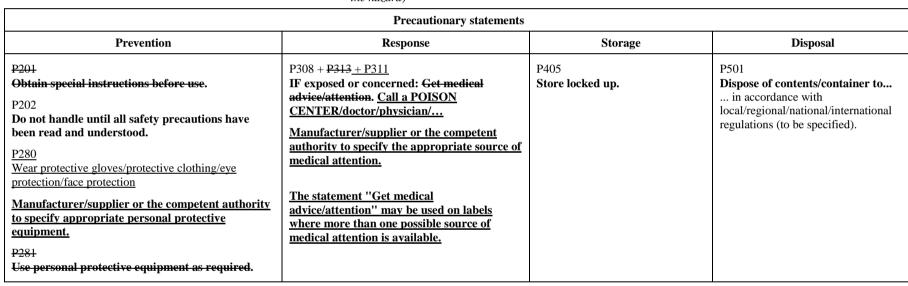
Hazard category Signal word	<u>Hazard statement</u>
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Danger H340 May cause genetic defects <...>

2 Warning H341 Suspected of causing genetic defects <...>

(state route of exposure if it is conclusively proven that no other routes of exposure cause

the hazard)



# CARCINOGENICITY (CHAPTER 3.6)

**Symbol** Health hazard

Hazard category	Signal word	Hazard statement
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Danger H350 May cause cancer <...>

2 Warning H351 Suspected of causing cancer <...>

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



Precautionary statements				
Prevention	Response	Storage	Disposal	
P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood.  P280 Wear protective gloves/protective clothing/eye protection/face protection  Manufacturer/supplier or the competent authority to specify appropriate personal protective equipment.  P281 Use personal protective equipment as required.	P308 + P313 + P311  IF exposed or concerned: Get medical advice/attention. Call a POISON  CENTER/doctor/physician/  Manufacturer/supplier or the competent authority to specify the appropriate source of medical attention.  The statement "Get medical advice/attention" may be used on labels where more than one possible source of medical attention is available.	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

Danger H360 May damage fertility or the unborn child <...> <<...>>

2 Warning H361 Suspected of damaging fertility or the unborn child <...> <<...>>

<...> (state specific effect if known)

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

cause the hazard)

Precautionary statements				
Prevention	Response	Storage	Disposal	
P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. P280 Wear protective gloves/protective clothing/eye protection/face protection  Manufacturer/supplier or the competent authority to specify appropriate personal protective equipment. P281	P308 + P313 + P311  IF exposed or concerned: Get medical advice/attention. Call a POISON CENTER/doctor/physician/  Manufacturer/supplier or the competent authority to specify the appropriate source of medical attention.  The statement "Get medical advice/attention" may be used on labels where more than one possible source of medical attention is available.	P405 Store locked up.	P501  Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified).	
Use personal protective equipment as required.				

### 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.  P202 Do not handle until all safety precautions have been read and understood  P260 Do not breathe dusts or mists if inhalable particles of dusts or mists may occur during use.  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.	P308 + P313 + P311  IF exposed or concerned: Get medical advice/attention. Call a POISON CENTER/doctor/physician/  Manufacturer/supplier or the competent authority to specify the appropriate source of medical attention.  The statement "Get medical advice/attention" may be used on labels where more than one possible source of medical attention is available.		

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

Symbol Health hazard

Hazard category Signal word Hazard statement Danger

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

H370

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



Precautionary statements				
Prevention	Response	Storage	Disposal	
P260  Do not breathe dust/fume/gas/mist/ vapours/spray.  Manufacturer/supplier or the competent authority to specify applicable conditions.  P264  Washthoroughly after handling Manufacturer/supplier or the competent authority to specify parts of the body to be washed after handling.  P270  Do not eat, drink or smoke when using this product.	P307 + P311  If exposed: call a POISON CENTER or doctor/physician.  P307 + P311  IF exposed: Call a POISON CENTER/or doctor/physician  Manufacturer/supplier or the competent authority to specify the appropriate source of medical attention.  The statement "Get medical advice/attention" may be used on labels where more than one possible source of medical attention is available.  P321  Specific treatment (see on this label)  Reference to supplemental first aid	P405 Store locked up.	P501  Dispose of contents/container to in accordance with local/regional/national/internatio nal regulations (to be specified).	

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

**Symbol** Health hazard

Hazard category Signal word Hazard statement

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



Precautionary statements			
Prevention	Response	Storage	Disposal
P260  Do not create/breathe dust/fume/gas/mist/vapours/spray.  Manufacturer/supplier or the competent authority to specify practicable precaution and applicable conditions.  P264  Wash thoroughly after handling.	P309 + P311  IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.	P405 Store locked up.	P501 <b>Dispose of contents/container to</b> in accordance with local/regional/national/international regulations (to be specified).
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.			

# 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. P260 Do not create/breathe dust/fume gas/mist/vapours/spray Manufacturer/supplier or the competent authority to specify practicable precaution and applicable conditions. P271 Use only outdoors or in a well-ventilated area.	P304 + P340  IF INHALED: Remove victim individual to fresh air and keep at rest in a position comfortable for breathing.  P312  Call a POISON CENTER/ordoctor/physician/ if you feel unwell.  Manufacturer/supplier or the competent authority to specify the appropriate source of medical attention.  The statement "Get medical advice/attention if you feel unwell" may be used on labels where more than one possible source of medical attention is available.	P403 + P233  Store in a well-ventilated place. Keep in a container tightly closed container.  - 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 Hazard statement

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 create/breathe dust/fume/gas/mist/vapours/spray. Manufacturer/supplier or the competent authority to specify practicable precaution and 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.  P312 Call a POISON CENTER/doctor/physician if you feel unwell  Manufacturer/supplier or the competent authority to specify the appropriate source of medical attention.		P501 <b>Dispose of contents/container to</b> in accordance with local/regional/national/international regulations (to be specified).	
P270  Do not eat, drink or smoke when using this product.	The statement "Get medical advice/attention if you feel unwell" may be used on labels where more than one possible source of medical attention is available.			

# 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 create/breathe dust/fume/gas/mist/vapours/spray.  Manufacturer/supplier or the competent authority to specify practicable precaution and applicable conditions.	P314 Get medical advice/attention if you feel unwell.  P312 Call a POISON CENTER/doctor/physician if you feel unwell  Manufacturer/supplier or the competent authority to specify the appropriate source of medical attention.  The statement "Get medical advice/attention		P501 Dispose of contents/container to in accordance with local/regional/national/internatio nal regulations (to be specified).	
	if you feel unwell" may be used on labels where more than one possible source of medical attention is available.			

# 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: Immediately call a POISON CENTER/doctor/physician/  Manufacturer/supplier or the competent authority to specify the appropriate source of medical attention.  The statement "Get immediate medical advice/attention" may be used on labels where more than one possible source of medical attention is available.  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).	

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# HAZARDOUS TO THE AQUATIC ENVIRONMENT - ACUTE HAZARD (CHAPTER 4.1)

**Symbol** Environment

Hazard category

Signal word

**Hazard statement** 

1

Warning

H400 Very toxic to aquatic life



Precautionary statements			
Prevention	Response	Storage	Disposal
P273 Avoid release to the environment if this is not the intended use.	P391 Collect spillage.		P501  Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified).

# 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 H410 Very toxic to aquatic life with long lasting effects

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

Precautionary statements			
Prevention	Response	Storage	Disposal
P273 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 - LONG-TERM HAZARD (CHAPTER 4.1)

Symbol No symbol

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

Precautionary statements			
Prevention	Response	Storage	Disposal
P273 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).

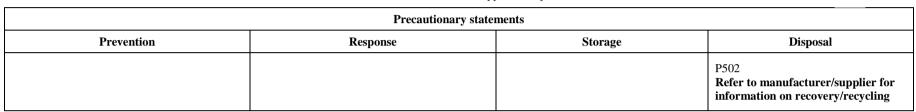
# HAZARDOUS TO THE OZONE LAYER (CHAPTER 4.2)

**Symbol** Exclamation mark

Hazard category Signal word Hazard statement

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

the upper atmosphere



.....