

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

19 September 2022

Forty-third session

Geneva, 7-9 December 2022

Item 3 (h) of the provisional agenda

**Work on the Globally Harmonized System
of Classification and Labelling of Chemicals:
improvement of annexes 1 to 3 and further
rationalization of precautionary statements**

Proposed amendments to precautionary statements in Annex 3 due to the respiratory sensitization hazard class

**Transmitted by the experts from the United Kingdom on behalf
of the informal working group on improving annexes 1, 2 and 3 of
the GHS**

This informal document sets out the changes proposed in document ST/SG/AC.10/C.4/2022/16. Existing (unchanged) text is shown in black, deleted text is shown in ~~striketrough~~, with new text shown in **blue bold** text.

Where a new respiratory sensitization entry receives exactly the same conditions for use (column 5) to that of another hazard class listed in an adjacent entry either above or below the new entry in the table, this is shown as a merged entry in column 5 of the table for these hazard classes in black text.

Where an existing merged conditions of use (column 5) entry has been split to allow for a new line entry for respiratory sensitization where no conditions for use are to be included, these conditions for use entries and the original text remains unchanged but is shown in **red** text.

Annex 3, Section 2

CODIFICATION AND USE OF PRECAUTIONARY STATEMENTS

A3.2.4.4 Where square brackets [...] appear around some text in a precautionary statement, this indicates that the text in square brackets is not appropriate in every case and should be used only in certain circumstances. In these cases, conditions for use explaining when the text should be used are given in column (5) of the tables. For example, P284 states: “~~**[In case of inadequate ventilation] wear respiratory protection.**~~” This statement is given with the condition for use “~~*text in square brackets may be used if additional information is provided with the chemical at the point of use that explains what type of ventilation would be adequate for safe use*~~”. The application of the condition for use should be interpreted as follows: If additional information is provided with the chemical explaining what type of ventilation would be adequate for safe use, the text in square brackets ~~may~~ be used. In this case, the statement would read: “~~**In case of inadequate ventilation wear respiratory protection.**~~” However, if the chemical is supplied without such information, the text in square brackets should not be used, and the precautionary statement should read: “**Wear respiratory protection.**” P264 states: “**Wash hands [and ...] thoroughly after handling.**” This statement is given with the condition for use: “~~*text in square brackets to be used when the manufacturer/supplier or the competent authority specify other parts of the body to be washed after handling*~~”. The application of the condition for use should be interpreted as follows: If additional information is provided with the chemical explaining what other part(s) of the body is to be washed following handling, then the text in brackets is to be used followed by the name of the relevant body part(s). However, if other part(s) of the body do not need to be specified, the text in square brackets should not be used, and the precautionary statement should read: “**Wash hands thoroughly after handling.**”

Table A3.2.2: Prevention precautionary statements

Code (1)	Prevention precautionary statements (2)	Hazard class (3)	Hazard category (4)	Conditions for use (5)
P233	Keep container tightly closed.	Flammable liquids (chapter 2.6)	1, 2, 3	<i>– if the liquid is volatile and may generate an explosive atmosphere.</i>
		Pyrophoric liquids (chapter 2.9)	1	
		Pyrophoric solids (chapter 2.10)	1	
		Desensitized explosives (chapter 2.17)	1, 2, 3, 4	
		Acute toxicity, inhalation (chapter 3.1)	1, 2, 3	<i>– if the chemical is volatile and may generate a hazardous atmosphere.</i>
		Respiratory sensitization (chapter 3.4)	1, 1A, 1B	
		Specific target organ toxicity, single exposure; respiratory tract irritation (chapter 3.8)	3	<i>– if the chemical is volatile and may generate a hazardous atmosphere.</i>
		Specific target organ toxicity, single exposure; narcotic effects (chapter 3.8)	3	
P260	Do not breathe dust/fume/gas/mist/vapours/spray.	Acute toxicity, inhalation (chapter 3.1)	1, 2	Manufacturer/supplier or the competent authority to specify applicable conditions physical state(s) .
		Respiratory sensitization (chapter 3.4)	1, 1A, 1B	
		Specific target organ toxicity, single exposure (chapter 3.8)	1, 2	
		Specific target organ toxicity, repeated exposure (chapter 3.9)	1, 2	
		Skin corrosion (chapter 3.2)	1, 1A, 1B, 1C	<i>– specify do not breathe dusts or mists</i>
		Reproductive toxicity, effects on or via lactation (chapter 3.7)	Additional category	<i>– if inhalable particles of dusts or mists may occur during use.</i>
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.	Acute toxicity, inhalation (chapter 3.1)	3, 4	<i>– may be omitted if P260 is given on the label.</i>
		Respiratory sensitization (chapter 3.4)	1, 1A, 1B	Manufacturer/supplier or the competent authority to specify applicable conditions.
		Skin sensitization (chapter 3.4)	1, 1A, 1B	

Code (1)	Prevention precautionary statements (2)	Hazard class (3)	Hazard category (4)	Conditions for use (5)
		Specific target organ toxicity, single exposure; respiratory tract irritation (chapter 3.8)	3	
		Specific target organ toxicity, single exposure; narcotic effects (chapter 3.8)	3	
P271	Use only outdoors or in a well-ventilated area with adequate ventilation.	Acute toxicity, inhalation (chapter 3.1)	1, 2, 3, 4	Manufacturer/supplier to specify what type of ventilation would be adequate for safe use on the safety data sheet and in any supplemental safety instructions provided to consumers.
		Respiratory sensitization (chapter 3.4)	1, 1A, 1B	
		Specific target organ toxicity, single exposure; respiratory tract irritation (chapter 3.8)	3	
		Specific target organ toxicity, single exposure; narcotic effects (chapter 3.8)	3	
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/...	Explosives (chapter 2.1)	1, 2A, 2B, 2C	Manufacturer/supplier or the competent authority to specify the appropriate personal protective equipment.
		Flammable gases (chapter 2.2)	1A, Pyrophoric gas	
		Flammable liquids (chapter 2.6)	1, 2, 3, 4	
		Flammable solids (chapter 2.7)	1, 2	
		Self-reactive substances and mixtures (chapter 2.8)	Types A, B, C, D, E, F	
		Pyrophoric liquids (chapter 2.9)	1	
		Pyrophoric solids (chapter 2.10)	1	
		Self-heating substances and mixtures (chapter 2.11)	1, 2	
		Substances and mixtures which, in contact with water, emit flammable gases (chapter 2.12)	1, 2, 3	
		Oxidizing liquids (chapter 2.13)	1, 2, 3	
		Oxidizing solids (chapter 2.14)	1, 2, 3	
		Organic peroxides (chapter 2.15)	Types A, B, C, D, E, F	

Code (1)	Prevention precautionary statements (2)	Hazard class (3)	Hazard category (4)	Conditions for use (5)
		Desensitized explosives (chapter 2.17)	1, 2, 3, 4	
		Acute toxicity, dermal (chapter 3.1)	1, 2, 3, 4	– <i>Specify protective gloves/clothing.</i> Manufacturer/supplier or the competent authority may further specify type of equipment where appropriate.
		Skin corrosion (chapter 3.2)	1, 1A, 1B, 1C	– <i>Specify protective gloves/clothing and eye/face protection.</i> Manufacturer/supplier or the competent authority may further specify type of equipment where appropriate.
		Skin irritation (chapter 3.2)	2	– <i>Specify protective gloves.</i>
		Skin sensitization (chapter 3.4)	1, 1A, 1B	Manufacturer/supplier or the competent authority may further specify type of equipment where appropriate.
		Serious eye damage (chapter 3.3)	1	– <i>Specify protective gloves and eye/face protection.</i>
		Eye irritation (chapter 3.3)	2/2A	Manufacturer/supplier or the competent authority may further specify type of equipment where appropriate.
		Respiratory sensitization (chapter 3.4)	1, 1A, 1B	– <i>Specify protective gloves/clothing.</i> Manufacturer/supplier or the competent authority may further specify type of equipment where appropriate.
		Germ cell mutagenicity (chapter 3.5)	1, 1A, 1B, 2	Manufacturer/supplier or the competent authority to specify the appropriate personal protective equipment.
		Carcinogenicity (chapter 3.6)	1, 1A, 1B, 2	
		Reproductive toxicity (chapter 3.7)	1, 1A, 1B, 2	
P284	{In case of inadequate ventilation} wear	Acute toxicity, inhalation (chapter 3.1)	1, 2	– <i>text in square brackets may be used if additional</i>

Code (1)	Prevention precautionary statements (2)	Hazard class (3)	Hazard category (4)	Conditions for use (5)
	respiratory protection.	Respiratory sensitization (chapter 3.4)	1, 1A, 1B	<p><i>information is provided with the chemical at the point of use that explains what type of ventilation would be adequate for safe use.</i></p> <p>Manufacturer/supplier or the competent authority to specify equipment.</p> <p>Manufacturer/supplier to specify on the safety data sheet what type of ventilation would be adequate for safe use and provide additional information with the chemical at the point of use that explains what type of respiratory equipment may also be needed.</p>

Table A3.2.4: Storage precautionary statements

Code (1)	Storage precautionary statements (2)	Hazard class (3)	Hazard category (4)	Conditions for use (5)	
P403	Store in a well-ventilated place.	Flammable gases (chapter 2.2)	1A	Flammable gas	
				Pyrophoric gas	
				Chemically unstable gas A	
				Chemically unstable gas B	
			1B, 2		
		Chemicals under pressure (chapter 2.3)	1, 2, 3		
		Oxidizing gases (chapter 2.4)	1		
		Gases under pressure (chapter 2.5)	Compressed gas		
	Liquefied gas				
	Refrigerated liquefied gas				
	Dissolved gas				

Code (1)	Storage precautionary statements (2)	Hazard class (3)	Hazard category (4)	Conditions for use (5)
		Flammable liquids (chapter 2.6)	1, 2, 3, 4	<i>– for flammable liquids Category 1 and other flammable liquids that are volatile and may generate an explosive atmosphere.</i>
		Self-reactive substances and mixtures (chapter 2.8)	Types A, B, C, D, E, F	<i>– except for temperature controlled self-reactive substances and mixtures or organic peroxides because condensation and consequent freezing may take place.</i>
		Organic peroxides (chapter 2.15)	Types A, B, C, D, E, F	
		Acute toxicity, inhalation (chapter 3.1)	1, 2, 3	<i>– if the chemical is volatile and may generate a hazardous atmosphere.</i>
		Respiratory sensitization (chapter 3.4)	1, 1A, 1B	
		Specific target organ toxicity, single exposure; respiratory tract irritation (chapter 3.8)	3	<i>– if the chemical is volatile and may generate a hazardous atmosphere.</i>
		Specific target organ toxicity, single exposure; narcotic effects (chapter 3.8)	3	

Annex 3, Section 3, Matrix of precautionary statements by hazard class/category

ACUTE TOXICITY – INHALATION

(CHAPTER 3.1)

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



Precautionary statements			
Prevention	Response	Storage	Disposal
<p>P260 Do not breathe dust/fume/gas/mist/ vapours/spray. Manufacturer/supplier or the competent authority to specify applicable conditions physical state(s).</p> <p>P271 Use only outdoors or in a well-ventilated area with adequate ventilation. Manufacturer/supplier to specify what type of ventilation would be adequate for safe use on the safety data sheet and in any supplemental safety instructions provided to consumers.</p> <p>P284 [In case of inadequate ventilation] wear respiratory protection. <i>—text in square brackets may be used if additional information is provided with the chemical at the point of use that explains what type of ventilation would be adequate for safe use.</i> Manufacturer/supplier or the competent authority to specify equipment. Manufacturer/supplier to specify on the safety data sheet what type of ventilation would be adequate for safe use and provide additional information with the chemical at the point of use that explains what type of respiratory equipment may also be needed.</p>	<p>P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.</p> <p>P316 Get emergency medical help immediately. Competent Authority or manufacturer / supplier may add, 'Call' followed by the appropriate emergency telephone number, or the appropriate emergency medical help provider, for example, a Poison Centre, Emergency Centre or Doctor.</p> <p>P320 Specific treatment is urgent (see ... on this label) – <i>if immediate administration of antidote is required.</i> ... Reference to supplemental first aid instruction.</p>	<p>P403 + P233 Store in a well-ventilated place. Keep container tightly closed. – <i>if the chemical is volatile and may generate a hazardous atmosphere.</i></p> <p>P405 Store locked up.</p>	<p>P501 Dispose of contents/container to... ... in accordance with local/regional/national/international regulations (to be specified). Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.</p>

ACUTE TOXICITY – INHALATION

(CHAPTER 3.1)

Hazard category	Symbol	Signal word	Hazard statement
3	Skull and crossbones	Danger	H331 Toxic if inhaled



Precautionary statements			
Prevention	Response	Storage	Disposal
<p>P261 Avoid breathing dust/fume/gas/mist/vapours/spray. – <i>may be omitted if P260 is given on the label</i> Manufacturer/supplier or the competent authority to specify applicable conditions.</p> <p>P271 Use only outdoors or in a well-ventilated area with adequate ventilation. Manufacturer/supplier to specify what type of ventilation would be adequate for safe use on the safety data sheet and in any supplemental safety instructions provided to consumers.</p>	<p>P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.</p> <p>P316 Get emergency medical help immediately. Competent Authority or manufacturer / supplier may add, ‘Call’ followed by the appropriate emergency telephone number, or the appropriate emergency medical help provider, for example, a Poison Centre, Emergency Centre or Doctor.</p> <p>P321 Specific treatment (see ... on this label) – <i>if immediate specific measures are required.</i> ... Reference to supplemental first aid instruction.</p>	<p>P403 + P233 Store in a well-ventilated place. Keep container tightly closed. – <i>if the chemical is volatile and may generate a hazardous atmosphere.</i></p> <p>P405 Store locked up.</p>	<p>P501 Dispose of content/container to... ... in accordance with local/regional/national/international regulations (to be specified). Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.</p>

ACUTE TOXICITY – INHALATION

(CHAPTER 3.1)

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



Precautionary statements			
Prevention	Response	Storage	Disposal
<p>P261 Avoid breathing dust/fume/gas/mist/vapours/spray. <i>– may be omitted if P260 is given on the label</i> Manufacturer/supplier or the competent authority to specify applicable conditions.</p> <p>P271 Use only outdoors or in a well-ventilated area with adequate ventilation. Manufacturer/supplier to specify what type of ventilation would be adequate for safe use on the safety data sheet and in any supplemental safety instructions provided to consumers.</p>	<p>P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.</p> <p>P317 Get medical help.</p>		

SENSITIZATION – RESPIRATORY


(CHAPTER 3.4)

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

Precautionary statements			
Prevention	Response	Storage	Disposal
<p>P233 Keep container tightly closed.</p> <p>P260 Do not breathe dust/fume/gas/mist/ vapours/spray. Manufacturer/supplier or the competent authority to specify applicable physical state(s).</p> <p>P261 Avoid breathing dust/fume/gas/mist/ vapours/spray. —may be omitted if P260 is given on the label Manufacturer/supplier or the competent authority to specify applicable conditions.</p> <p>P271 Use only outdoors or with adequate ventilation. Manufacturer/supplier to specify what type of ventilation would be adequate for safe use on the safety data sheet and in any supplemental safety instructions provided to consumers. P280 Wear protective gloves/protective clothing. Manufacturer/supplier or the competent authority may further specify type of equipment where appropriate.</p> <p>P284 {In case of inadequate ventilation} wear respiratory protection. —text in square brackets may be used if additional information is provided with the chemical at the point of use that explains what type of ventilation would be adequate for safe use. Manufacturer/supplier or the competent authority to specify equipment. Manufacturer/supplier to specify on the safety data sheet what type of ventilation would be adequate for safe use and provide additional information with the chemical at the point of use that explains what type of respiratory equipment may also be needed.</p>	<p>P304 + P340 IF INHALED: remove person to fresh air and keep comfortable for breathing.</p> <p>P342 + P316 If experiencing respiratory symptoms: Get emergency medical help immediately. Competent Authority or manufacturer / supplier may add, ‘Call’ followed by the appropriate emergency telephone number, or the appropriate emergency medical help provider, for example, a Poison Centre, Emergency Centre or Doctor.</p>	<p>P403 Store in a well-ventilated place.</p>	<p>P501 Dispose of contents/container to... ... in accordance with local/regional/national/international regulations (to be specified). Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.</p>


SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE)

(CHAPTER 3.8)

Hazard category	Symbol	Signal word	Hazard statement
1	Health hazard 	Danger	H370 Causes damage to organs <...> <<...>> <...> (or state all organs affected if known) <<...>> (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)

Precautionary statements			
Prevention	Response	Storage	Disposal
<p>P260 Do not breathe dust/fume/gas/mist/vapours/spray. Manufacturer/supplier or the competent authority to specify applicable conditions physical state(s).</p> <p>P264 Wash hands [and...] thoroughly after handling. - text in square brackets to be used when the manufacturer/supplier or the competent authority specify other parts of the body to be washed after handling.</p> <p>P270 Do not eat, drink or smoke when using this product.</p>	<p>P308 + P316 IF exposed or concerned: Get emergency medical help immediately. Competent Authority or manufacturer / supplier may add, 'Call' followed by the appropriate emergency telephone number, or the appropriate emergency medical help provider, for example, a Poison Centre, Emergency Centre or Doctor.</p> <p>P321 Specific treatment (see ... on this label) – if immediate measures are required. ... Reference to supplemental first aid instruction.</p>	<p>P405 Store locked up.</p>	<p>P501 Dispose of contents/container to... ... in accordance with local/regional/national/international regulations (to be specified). Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.</p>

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

Hazard category	Symbol	Signal word	Hazard statement
2	Health hazard	Warning	H371 May cause damage to organs <...> <<...>>
			<...> (or state all organs affected, if known)
			<<...>> (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)

Precautionary statements			
Prevention	Response	Storage	Disposal
<p>P260 Do not breathe dust/fume/gas/mist/vapours/spray. Manufacturer/supplier or the competent authority to specify applicable conditions physical state(s).</p> <p>P264 Wash hands [and...] thoroughly after handling. <i>- text in square brackets to be used when the manufacturer/supplier or the competent authority specify other parts of the body to be washed after handling.</i></p> <p>P270 Do not eat, drink or smoke when using this product.</p>	<p>P308 + P316 IF exposed or concerned: Get emergency medical help immediately. Competent Authority or manufacturer / supplier may add, 'Call' followed by the appropriate emergency telephone number, or the appropriate emergency medical help provider, for example, a Poison Centre, Emergency Centre or Doctor.</p>	<p>P405 Store locked up.</p>	<p>P501 Dispose of contents/container to... ... in accordance with local/regional/national/international regulations (to be specified). Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.</p>

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


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



Precautionary statements			
Prevention	Response	Storage	Disposal
<p>P261 Avoid breathing dust/fume/gas/mist/vapours/spray. – <i>may be omitted if P260 is given on the label.</i> Manufacturer/supplier or the competent authority to specify applicable conditions.</p> <p>P271 Use only outdoors or in a well-ventilated area with adequate ventilation. Manufacturer/supplier to specify what type of ventilation would be adequate for safe use on the safety data sheet and in any supplemental safety instructions provided to consumers.</p>	<p>P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.</p> <p>P319 Get medical help if you feel unwell.</p>	<p>P403 + P233 Store in a well-ventilated place. Keep container tightly closed. – <i>if the chemical is volatile and may generate a hazardous atmosphere.</i></p> <p>P405 Store locked up.</p>	<p>P501 Dispose of contents/container to... ... in accordance with local/regional/national/international regulations (to be specified). Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.</p>


SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE)

(CHAPTER 3.9)

Hazard category	Symbol	Signal word	Hazard statement
1	Health hazard 	Danger	H372 Causes damage to organs <...> through prolonged or repeated exposure <<...>> <...> (state all organs affected, if known) <<...>> (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)

Precautionary statements			
Prevention	Response	Storage	Disposal
P260 Do not breathe dust/fume/gas/mist/vapours/spray. Manufacturer/supplier or the competent authority to specify applicable conditions physical state(s) . P264 Wash hands [and...] thoroughly after handling. <i>- text in square brackets to be used when the manufacturer/supplier or the competent authority specify other parts of the body to be washed after handling.</i> P270 Do not eat, drink or smoke when using this product.	P319 Get medical help if you feel unwell.		P501 Dispose of contents/container to... ... in accordance with local/regional/national/international regulations (to be specified). Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.

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

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

Precautionary statements			
Prevention	Response	Storage	Disposal
P260 Do not breathe dust/fume/gas/mist/vapours/spray. Manufacturer/supplier or the competent authority to specify applicable conditions physical state(s).	P319 Get medical help if you feel unwell.		P501 Dispose of contents/container to... ... in accordance with local/regional/national/international regulations (to be specified). Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.

