



Secretariat

Distr.: General
19 September 2016
English
Original: English and French

**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**

Thirty-second session

Geneva, 7-9 December 2016

Item 2 (a) of the provisional agenda

**Classification criteria and related hazard communication:
recommendations made by the Sub-Committee on its
twenty-ninth, thirtieth and thirty-first sessions**

**Consolidated list of amendments adopted by the Sub-
Committee at its twenty-ninth, thirtieth and thirty-first
sessions**

Note by the secretariat¹

This document contains the consolidated list of drafts amendments to the sixth revised edition of the Globally Harmonized System of Classification and Labelling of Chemicals (ST/SG/AC.10/30/Rev.6) adopted by the Sub-Committee at its twenty-ninth, thirtieth and thirty-first sessions.

¹ In accordance with the programme of work of the Sub-Committee for 2015-2016 approved by the Committee at its seventh session (see ST/SG/AC.10/C.3/92, paragraph 95 and ST/SG/AC.10/42, para. 15)

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Chapter 1.2

Delete the definitions of “Skin corrosion”, “Skin irritation”, “Serious eye damage”, “Eye irritation”, “Dermal corrosion” and “Dermal irritation”.

In the definition of “Respiratory sensitizer”, replace (twice) “a substance” by “a substance or mixture”.

In the definition of “Skin sensitizer”, replace “a substance” by “a substance or mixture”.

(Reference document: ST/SG/AC.10/C.4/62, annex I)

Chapter 1.5

Table 1.5.1 For the hazard class “Aspiration hazard”, categories 1 and 2, replace the text under the heading “Cut-off value/concentration limit” with “ $\geq 1.0\%$ ”.

1.5.3.3.1 Add the following sentence at the end of the paragraph:

“Guidance on the preparation of SDS’s under the requirements of the GHS can be found in Annex 4.”.

1.5.3.3.3 Delete.

1.5.3.3.4 Current paragraph 1.5.3.3.4 becomes new paragraph 1.5.3.3.3.

(Reference document: ST/SG/AC.10/C.4/2016/9 and ST/SG/AC.10/C.4/62, annex I)

Chapter 2.17

2.17.2.1 Amend the text before sub-paragraphs (a) and (b) to read as follows: “Any explosive while in a desensitized state shall be considered in this class unless, in that state.”.

2.17.2.1 (a) Amend to read as follows:

“(a) It is intended to produce a practical explosive or pyrotechnic effect;”.

2.17.2.1 (b) Replace “their corrected burning rate” by “the corrected burning rate”.

2.17.2.1 (c) Replace “Their exothermic decomposition” by “The exothermic decomposition”.

In NOTE 1, after “which meet the criterion (a) or (b)” insert “in their desensitized state”.

(Reference document: ST/SG/AC.10/C.4/62, annex I)

Chapter 3.1

3.1.1 Amend the definition for “acute toxicity” to read as follows:

“Acute toxicity refers to serious adverse health effects (i.e., lethality) occurring after a single or short-term oral, dermal or inhalation exposure to a substance or mixture.”

(Reference document: ST/SG/AC.10/C.4/2016/9 and ST/SG/AC.10/C.4/62, annex I)

3.1.2 Amend table 3.1.1 to read as follows:

“Table 3.1.1: Acute toxicity estimate (ATE) values and criteria for acute toxicity hazard categories

Exposure route	Category 1	Category 2	Category 3	Category 4	Category 5
Oral (mg/kg bodyweight) <i>See notes (a) and (b)</i>	ATE ≤ 5	5 < ATE ≤ 50	50 < ATE ≤ 300	300 < ATE ≤ 2000	2000 < ATE ≤ 5000 <i>See detailed criteria in Note (g)</i>
Dermal (mg/kg bodyweight) <i>See notes (a) and (b)</i>	ATE ≤ 50	50 < ATE ≤ 200	200 < ATE ≤ 1000	1000 < ATE ≤ 2000	
Gases (ppmV) <i>See notes (a), (b) and (c)</i>	ATE ≤ 100	100 < ATE ≤ 500	500 < ATE ≤ 2500	2500 < ATE ≤ 20000	<i>See detailed criteria in Note (g)</i>
Vapours (mg/l) <i>See notes (a), (b), (c), (d) and (e)</i>	ATE ≤ 0.5	0.5 < ATE ≤ 2.0	2.0 < ATE ≤ 10.0	10.0 < ATE ≤ 20.0	
Dusts and Mists (mg/l) <i>See notes (a), (b), (c) and (f)</i>	ATE ≤ 0.05	0.05 < ATE ≤ 0.5	0.5 < ATE ≤ 1.0	1.0 < ATE ≤ 5.0	

Note: Gas concentrations are expressed in parts per million per volume (ppmV).”.

(Reference document: ST/SG/AC.10/C.4/62, annex I)

3.1.2.1 Insert the following sentence before the current last sentence (“Explanatory notes...Table 3.1.1”):

“While some *in vivo* methods determine LD₅₀/LC₅₀ values directly, other newer *in vivo* methods (e.g. using fewer animals) consider other indicators of acute toxicity, such as significant clinical signs of toxicity, which are used by reference to assign the hazard category.”.

(Reference document: ST/SG/AC.10/C.4/2016/9 and ST/SG/AC.10/C.4/62, annex I)

3.1.2.3 Add the following new sentence at the end of the paragraph:

“In cases where data from human experience (i.e. occupational data, data from accident databases, epidemiology studies, clinical reports) is also available, it should be considered in a weight of evidence approach consistent with the principles described in 1.3.2.4.9.”.

(Reference document: ST/SG/AC.10/C.4/62, annex I)

Chapter 3.2

3.2.1.1 Amend to read as follows:

“*Skin corrosion* refers to the production of irreversible damage to the skin; namely, visible necrosis through the epidermis and into the dermis occurring after exposure to a substance or mixture.

Skin irritation refers to the production of reversible damage to the skin occurring after exposure to a substance or mixture.”.

Consequential amendment: Delete related footnote 1 and renumber subsequent footnotes accordingly.

(Reference document: ST/SG/AC.10/C.4/2016/9 and ST/SG/AC.10/C.4/62, annex I)

Chapter 3.3

3.3.1.1 Amend to read as follows:

“Serious eye damage refers to the production of tissue damage in the eye, or serious physical decay of vision, which is not fully reversible, occurring after exposure of the eye to a substance or mixture.

Eye irritation refers to the production of changes in the eye, which are fully reversible, occurring after exposure of the eye to a substance or mixture.”.

Consequential amendment: Delete related footnote 1 and renumber subsequent footnotes accordingly.

(Reference document: ST/SG/AC.10/C.4/2016/9 and ST/SG/AC.10/C.4/62, annex I)

Chapter 3.4

3.4.1.1 Amend to read as follows:

“Respiratory sensitization refers to hypersensitivity of the airways after inhalation of a substance or a mixture.

Skin sensitization refers to an allergic response after skin contact with a substance or a mixture.”.

Consequential amendment: Delete related footnote 1 and renumber subsequent footnotes accordingly.

(Reference document: ST/SG/AC.10/C.4/2016/9 and ST/SG/AC.10/C.4/62, annex I)

Chapter 3.5

3.5.1.1 Insert a new paragraph to read as follows:

“3.5.1.1 *Germ cell mutagenicity* refers to heritable gene mutations, including heritable structural and numerical chromosome aberrations in germ cells occurring after exposure to a substance or mixture.”.

Current paragraphs 3.5.1.1 to 3.5.1.4 become new paragraphs 3.5.1.2 to 3.5.1.5.

(Reference document: ST/SG/AC.10/C.4/2016/9 and ST/SG/AC.10/C.4/62, annex I)

Chapter 3.6

3.6.1 Amend the first sentence to read as follows:

“Carcinogenicity refers to the induction of cancer or an increase in the incidence of cancer after exposure to a substance or mixture.”.

(Reference document: ST/SG/AC.10/C.4/2016/9 and ST/SG/AC.10/C.4/62, annex I)

Chapter 3.7

3.7.1.1 Amend the first sentence to read as follows:

“Reproductive toxicity refers to adverse effects on sexual function and fertility in adult males and females, as well as developmental toxicity in the offspring, occurring after exposure to a substance or mixture.”

In the last paragraph, replace “Nonetheless, chemicals with these effects” with “Nonetheless, substances and mixtures with these effects”.

(Reference document: ST/SG/AC.10/C.4/2016/9 and ST/SG/AC.10/C.4/62, annex I)

Chapter 3.8

3.8.1.1 Amend the first sentence to read as follows:

“Specific target organ toxicity – single exposure refers to specific, non-lethal toxic effects on target organs that arise from a single exposure to a substance or mixture.”

(Reference document: ST/SG/AC.10/C.4/2016/9 and ST/SG/AC.10/C.4/62, annex I)

Chapter 3.9

3.9.1.1 Amend the first sentence to read as follows:

“Specific target organ toxicity – repeated exposure refers to specific toxic effects on target organs that arise from repeated exposure to a substance or mixture.”

(Reference document: ST/SG/AC.10/C.4/2016/9 and ST/SG/AC.10/C.4/62, annex I)

Chapter 3.10

3.10.1 Amend the title to read: **“Definitions and general considerations”**

3.10.1.1 Delete.

3.10.1.2 Renumber as 3.10.1.1.

3.10.1.3 Renumber as 3.10.1.2 and amend to read:

“Aspiration hazard refers to severe acute effects such as chemical pneumonia, pulmonary injury or death after aspiration of a substance or mixture.”

3.10.1.4 and 3.10.1.5 Renumber as 3.10.1.3 and 3.10.1.4.

(Reference document: ST/SG/AC.10/C.4/2016/9 and ST/SG/AC.10/C.4/62, annex I)

Annex 3

Section 2, paragraph A3.2.3.3

Amend the beginning of the last sentence to read as follows:

“For example in P280 “**Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/...**” could read” (*remainder of the sentence unchanged*)

(Reference: consequential amendment to the amendment of the text of precautionary statement P280)

Section 2, Table A3.2.2

P280

Amend the text of the precautionary statement in column 2 to read as follows:

“Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/...”

For the hazard classes “Explosives”, “Flammable gases”, “Flammable liquids”, “Flammable solids”, “Self-reactive substances and mixtures”, “Pyrophoric liquids”, “Pyrophoric solids”, “Self-heating substances and mixtures”, “Substances and mixtures which, in contact with water, emit flammable gases”, “Oxidizing liquids”, “Oxidizing solids”, “Organic peroxides”, “Desensitized explosives”, “Germ cell mutagenicity”, “Carcinogenicity” and “Reproductive toxicity”: amend the precautionary statement in column (5) to read as follows:

“Manufacturer/supplier or the competent authority to specify the appropriate personal protective equipment.”.

(Reference document: ST/SG/AC.10/C.4/2016/1 and ST/SG/AC.10/C.4/62, annex I)

Section 2, Table A3.2.5

P503

Insert a new precautionary statement P503 to read as follows:

Code (1)	Disposal precautionary statements (2)	Hazard class (3)	Hazard category (4)	Conditions for use (5)
P503	Refer to manufacturer/ supplier/... for information on disposal/recovery/recycling	Explosives (chapter 2.1)	Unstable explosives and Divisions 1.1, 1.2, 1.3, 1.4 and 1.5	... Manufacturer/supplier or the competent authority to specify appropriate source of information in accordance with local/regional/national/international regulations as applicable

Consequential amendment

For P501, delete the entry for explosives in columns (3) and (4).

Section 3, matrix tables in paragraph A3.3.5.1

- For the tables applicable to the following hazard classes and categories:
 - “Explosives”, categories: Unstable explosive and divisions 1.1 to 1.5
 - “Flammable gases”, category: Pyrophoric gas
 - “Flammable liquids”, categories 1 to 4

- “Flammable solids”, categories 1 and 2
- “Self-reactive substances and mixtures”, types A to F
- “Pyrophoric liquids” and “Pyrophoric solids”: category 1
- “Self-heating substances and mixtures”, categories 1 and 2
- “Substances and mixtures which, in contact with water, emit flammable gases”, “Oxidizing liquids” and “Oxidizing solids”, categories 1 to 3
- “Organic peroxides”, Types A to F
- “Desensitized explosives”, categories 1 to 4
- “Germ cell mutagenicity”, “Carcinogenicity” and “Reproductive toxicity”: categories 1 and 2

Under the column “Prevention”, amend precautionary statement P280 to read as follows:

“Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/...”

Manufacturer/supplier or the competent authority to specify the appropriate personal protective equipment.”

(Reference: consequential amendment to the amendment of the text of precautionary statement P280)

- In the tables for Explosives (Unstable explosives and Divisions 1.1, 1.2, 1.3, 1.4 and 1.5), replace precautionary statement P501 by the following:

“P503

Refer to manufacturer/supplier/... for information on disposal/recovery/recycling. Manufacturer/supplier or competent authority to specify appropriate source of information in accordance with local/regional/national/international regulation as applicable.”.

(Reference document: ST/SG/AC.10/C.4/60, annex I)

Annex 7

In example 7, replace the statement **“Wear protective gloves, protective clothing/eye protection/face protection [as specified....]”** with **“Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/...”**

(Reference: consequential amendment to the amendment of the text of precautionary statement P280)