UN/SCEGHS/18/INF.16

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

Eighteenth session
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Item 3 of the provisional agenda

HAZARD COMMUNICATION ISSUES

Hazard communication for supply and use of aerosols

Transmitted by the experts from United Kingdom and FEA

Introduction

1. At the last session of the Sub-Committee, United Kingdom submitted an informal document UN/SCEGHS/17/INF.4 (also submitted to the SCETDG as UN/SCETDG/35/INF.11) proposing that aerosols should not fall within the scope of Chapter 2.5 of the GHS, Gases Under Pressure.

2. The Sub-Committee of Experts on the Transport of Dangerous Goods was of the view that aerosols should not fall within the scope of chapter 2.5 of the GHS (gases under pressure), although the proposal was not agreed by the UNSCEGHS. However most experts did agree that the pictogram for gases under pressure should not be required for aerosols falling within the scope of the definition of gases under pressure, and that further work on the development and harmonization of hazard and precautionary statements applicable to these aerosols was needed. Some experts proposed that the precautionary phrases which are currently being used by different regulatory regimes all over the world be also taken into account.

3. Germany, United Kingdom and EIGA have jointly submitted the working document ST/SG/AC.10/C.4/2009/9 ‘Pictogram for gases under pressure’ and propose to remove the pictogram "gas cylinder" for the purposes of supply and use from the GHS.

4. The category ‘Flammable Aerosols’ was agreed in December 2002 and added to the fourth edition of the Manual of Tests and Criteria and into Chapter 2.3 of the ‘Purple Book’ in 2003. That work included consideration of ‘non flammable’ aerosols which are not required to be classified. The subcommittee now, however, is returning to the subject in the context of another ‘new’ GHS category, ‘gases under pressure’ which was discussed and developed in parallel with the work on aerosols. As a result the experts from UK and FEA believe there remains a lack of clarity in proposed labelling requirements for non-flammable and flammable aerosols.

5. The experts from United Kingdom and FEA suggest that the discussion should centre on the following points:

- The agreed labelling provisions for flammable aerosols already include phrases which are specific to all aerosols (not only to flammable ones). For consistency, the phrases could be applied to all aerosols. If the Sub-Committee considers that those phrases need adaptation, consistency must be maintained for flammable aerosols.

- To ensure that statutory warnings remain easy to read, understand and apply, all labelling requirements related to aerosols (flammable and non-flammable aerosols) should be kept together in Chapter 2.3 (flammable aerosols). Aerosols would then be exempted from the scope of Chapter 2.5 (gases under pressure).

- The agreed labelling provisions for flammable aerosols in Chapter 2.3 (flammable aerosols) have proven to be effective within Europe for more than a decade (corresponding to around 70 billion units). There is no justification or need for additional labelling requirements on flammable aerosols.

- For non-flammable aerosols sets of warning phrases have been in place worldwide e.g. in Europe for 35 years. There is no indication that any additional consumer information is necessary for non-flammable aerosols.

6. The warnings in use in Europe are similar to those used elsewhere around the world. These include warnings which apply to all aerosols, flammable or not. Please find below some findings on different regulatory regimes all over the world for non-flammable aerosol consumer products. The labelling provisions related to flammability are generally simply added onto these standard warnings. Please note that several countries have not yet implemented the GHS (i.e. the UN classification scheme for flammable aerosols) in their national consumer products legislation.

Country	Statements[1]	GHS equivalence	Scope / remarks	Source	Total Aerosol Production 2007 (in units)
Argentina	Do not expose to temperature exceeding 50ºC. Do not burn. Do not pierce. ***Prohibited to refill.***	P412 P251	'Class D' aerosols (no flame).	Standard IRAM 3793	736 millions
Australia	PRESSURISED DISPENSER. DO NOT PIERCE OR BURN, EVEN AFTER USE. PROTECT FROM SUNLIGHT AND DO NOT EXPOSE TO TEMPERATURES EXCEEDING 50°C.	P251 P410 + P412	All aerosol dispensers. Similar or equivalent words may be used to stress the hazard of the product.	Australian Dangerous Goods Code (7th ed). Australian Standard AS2278.1-2008	235 millions
Canada (1)	 CAUTION CONTENTS UNDER PRESSURE. Container may explode if heated. Do not puncture. Do not burn. Store away from heat.	 Warning H280 P251 P411	Consumer 'pressurised containers' (aerosols), except cosmetics and disinfectants. Products which have a flame projection of less than 15 cm.	Consumer Chemicals and Containers Regulations, 2001.	190 millions

[1] Statements in bold italic have no GHS equivalence.

Country	Statements[1]	GHS equivalence	Scope / remarks	Source	Total Aerosol Production 2007 (in units)
Canada (2)	 CAUTION CONTAINER MAY EXPLODE IF HEATED. Contents under pressure. Do not place in hot water or near radiators, stoves or other sources of heat. Do not puncture or incinerate container or store at temperatures over 50°C.	 Warning H280 P210 P251	Cosmetics and disinfectants in 'pressurised containers'. Products with a flame projection of less than 15cm.	Cosmetic Regulations, 2009	
China			Classification criteria for flammable aerosols are fully in line with the GHS. Non-flammable aerosols are then 'not classified'. Flammable and non-flammable aerosols do not additionally belong to the physical hazard category 'gases under pressure'.	GB20758-2006 "Safety rules for classification , precautionary labelling and precautionary statements of chemicals – flammable aerosols	1031 millions
EU-27	Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. ***X% by mass of the contents are flammable.***	P410 + P412 P251	All aerosol dispensers. Last phrase to use only for non-flammable aerosols containing flammable components.	Aerosol Dispensers Directive 75/324/EEC	5414 millions

Country	Statements[1]	GHS equivalence	Scope / remarks	Source	Total Aerosol Production 2007 (in units)
Japan (1)	***Attention to High Temperature.*** ***Comply with following cautions since it is dangerous due to high pressurised gas:*** Do not expose to the place like direct sun shine comes, close to fire, where the temperature goes up to 40°C over, since it may be exploded if heated. Do not put into fire. ***Do not throw away before use up.*** ***High pressured gas: HFC 134a.***	P410 + P412 P251 (part.)	Non-flammable aerosols using non-flammable liquefied gas propellant HFC-134a.	High Pressure Gas Regulation	565 millions
Japan (2)	***Attention to High Temperature.*** ***Comply with following cautions due to pressurised product.*** Do not expose to temperature exceeding 40°C. Do not put into fire. ***Do not throw away before use up.***	P251 (part.) P412	Non-flammable aerosols using non-flammable compressed gas propellant CO_2, N_2.	Voluntary industry practice (AIAJ)	
New Zealand	Keep in cool place away from heat. Do not puncture can or throw in fire even when empty. A warning that the contents are under pressure; and a warning not to expose the aerosol dispenser to heat and not to pierce or burn it, even after use.	P235 P251 P412.	Equivalent approved wording may be used.	Dangerous Goods Labelling Regulations 1978. Hazardous Substances (Compressed Gases) Regulations 2004.	< 50 millions

Country	Statements[1]	GHS equivalence	Scope / remarks	Source	Total Aerosol Production 2007 (in units)
South Africa	Pressurized container- (protect from sunlight and) do not expose to temperatures exceeding 50°C. Do not pierce (puncture) or burn (incinerate), even when empty. Keep out of reach of children (even when empty). Do not spray near naked flame (or incandescent material). Keep away from source of ignition - no smoking. Use in a well-ventilated environment. ***Use only as directed.***	P410 + P412 P251 P102 P211 P210 P271	Non-flammable aerosols.	Industry guidance: AMA Code of Practice. AMA labelling guidelines SANS 10265	216 millions
USA	WARNING--CONTENTS UNDER PRESSURE Do not puncture or incinerate container. Do not expose to heat or store at temperatures above 120 [deg]F. Keep out of the reach of children.	Warning H280 (part.) P251 (part.) P412 P102	Phrases to use when the only hazard associated with a self-pressurized container is that the contents are under pressure (consumer uses). The word “CAUTION” may be substituted for the word “WARNING”.	CFR Title 16—*Commercial Practices*, Chapter II--*Consumer Product Safety Commission*, Part 1500 *Hazardous substances and articles; administration and enforcement regulations*	3655 millions

7. Based on the above elements, the experts from UK and FEA suggest the following consistent labelling provisions for both flammable and non-flammable aerosols:

Label elements for aerosols (i.e. for extremely flammable, flammable and non-flammable aerosols)			
CLASSIFICATION	Category 1	Category 2	new 'Category 3' non-flammable aerosols
GHS Pictograms			--
Signal word	Danger	Warning	--
Hazard statement	Extremely flammable aerosol (H222) HXXX Pressurized container (new hazard statement)	Flammable aerosol (H223) HXXX Pressurized container (new hazard statement).	HXXX Pressurized container (new hazard statement)
Precautionary Statement Prevention	'Keep away from heat/sparks/open flames/hot surfaces. No smoking' (P210) 'Do not spray on an open flame or other ignition source.' (P211) '~~Pressurized container:~~ Do not pierce or burn, even after use.' (revised P251)	'Keep away from heat/sparks/open flames/hot surfaces. No smoking' (P210) 'Do not spray on an open flame or other ignition source.' (P211) '~~Pressurized container:~~ Do not pierce or burn, even after use.' (revised P251)	'Keep away from heat/sparks/open flames/hot surfaces. No smoking' (P210) '~~Pressurized container:~~ Do not pierce or burn, even after use.' (revised P251)
Precautionary Statement Response			
Precautionary Statement Storage	'Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F' (P410 + P412)	'Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F' (P410 + P412)	'Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F' (P410 + P412) X% by mass of the contents are flammable.[2] (new Pxxx)
Precautionary Statement Disposal			

[2] Only when the aerosol contains flammable components.

8. Aerosols for the general public will additionally be labelled with P102 ‘Keep out of reach of children’.

9. This would be in line with the intention of the various legislations around the world which clearly have a similar purpose.

10. If agreed by the Sub-Committee, the experts UK and FEA will be pleased to convert this informal proposal into a working document including all necessary editorial changes for approval at the next Sub-Committee session.

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