

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

22 November 2016

**Sub-Committee of Experts on the  
Transport of Dangerous Goods**

**Fiftieth session**

Geneva, 28 – 6 December 2016

Item 7 (c) of the provisional agenda

**Issues relating to the Globally Harmonized System  
of Classification and Labelling of Chemicals:  
classification criteria for flammable gases**

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

**Thirty-second session**

Geneva, 7–9 (morning) December 2016

Item 2 (b) of the provisional agenda

**Classification criteria and related hazard  
communication: work of the TDG Sub-Committee on  
matters of interest to the GHS Sub-Committee**

**Classification criteria and hazard communication for  
flammable gases: options in response to comments on Table  
A1.2 and its related notes in document  
ST/SG/AC.10/C.3/2016/58-ST/SG/AC.10/C.4/2016/12**

**Transmitted by the experts from Belgium and Japan**

**Introduction**

1. Document ST/SG/AC.10/C.3/2016/58–ST/SG/AC.10/C.4/2016/12 was submitted on 9 September 2016 for consideration of both sub-committees. It is a proposal for modification of the GHS classification criteria and GHS hazard communication for flammable gases. This modification would have no effect on the UN Recommendations on the Transport of Dangerous Goods (TDG), Model Regulations.
2. In response to this proposal the drafting group received comments from various delegations. One comment was that the deletion of the pictogram in the column of the UN Model Regulations for pyrophoric gases in Table 1A.2 of Annex 1 was undesirable and that, in fact, the same pictogram should be added in that column for chemically unstable flammable gases. The drafting group consulted various delegations on this matter and found that they could generally agree. There was discussion, however, on the need for and content of a footnote b.
3. In as much as GHS is used by non-transport experts, a footnote to help explain the relation between the GHS and the TDG Model Regulations for pyrophoric gases and chemically unstable gases may be considered.
4. This informal document presents a revised Table A1.2 and various options for note b. It is proposed that this table and one of the note b options replace the corresponding sections of document ST/SG/AC.10/C.3/2016/58– ST/SG/AC.10/C.4/2016/12.

## Proposal

5. In Table A1.2, under the heading “UN Model Regulations”, for pyrophoric and unstable gases, insert the pictogram for flammable gases and a reference to note b as follows (*changes with respect to the table in document ST/SG/AC.10/C.3/2016/58–ST/SG/AC.10/C.4/2016/12 are indicated*).

Classification			Labelling				Hazard statement codes	
Hazard class	Hazard category		Pictogram		Signal word	Hazard statement		
			GHS	UN Model Regulations <sup>a</sup>				
Flammable gases	1A	Flammable gas			Danger	Extremely flammable gas	H220	
		Pyrophoric gas		<i>See note b</i> 	Danger	Extremely flammable gas May ignite spontaneously if exposed to air	H220 H232	
		Chemically unstable gas	A		<i>See note b</i> 	Danger	Extremely flammable gas May react explosively even in the absence of air	H220 H230
			B		<i>See note b</i> 	Danger	Extremely flammable gas May react explosively even in the absence of air at elevated pressure and/or temperature	H220 H231
		1B			Danger	Flammable gas	H221	
	2	No pictogram	Not required	Warning	Flammable gas	H221		

<sup>a</sup> Under the UN Recommendations on the Transport of Dangerous Goods, Model Regulations, the symbol, number and border line may be shown in black instead of white. The background colour stays red in both cases.

<sup>b</sup> [See options below]

## **Options for note b**

### **Option 1**

No text (note b is not necessary)

### **Option 2**

“<sup>b</sup> Under the *UN Recommendations on the Transport of Dangerous Goods, Model Regulations*, transport is not authorized unless stabilized or specific conditions are complied with.”

### **Option 3**

“<sup>b</sup> For transport conditions, see *UN Recommendations on the Transport of Dangerous Goods, Model Regulations*”.

### **Option 4**

“<sup>b</sup> Transport is only allowed when specific conditions are met, see *UN Recommendations on the Transport of Dangerous Goods, Model Regulations*.”

### **Option 5**

“<sup>b</sup> Under the *UN Recommendations on the Transport of Dangerous Goods, Model Regulations* classified as flammable gases.”

### **Option 6**

“<sup>b</sup> The UN Model Regulations pictogram is assigned because these gases are within Division 2.1 of the Model Regulations. For transport conditions, see UN Recommendations on the Transport of Dangerous Goods, Model Regulations.”

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