

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

28 November 2022

Sub-Committee of Experts on the  
Transport of Dangerous Goods

Sixty-first session

Geneva, 28 November-6 December 2022  
Item 10 (c) of the provisional agenda

Issues relating to the Globally Harmonized System:  
miscellaneous

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

Forty-third session

Geneva, 7-9 December 2022  
Item 3 (a) of the provisional agenda

Work on the Globally Harmonized System of  
Classification and Labelling of Chemicals: work of the  
Sub-Committee of Experts on the Transport of  
Dangerous Goods on matters of interest to the Sub-  
Committee

**Alternative proposal to ST/SG/AC.10/C.3/2022/66 –  
ST/SG/AC.10/C.4/2022/17: Metal powders and powders of  
metals or metal alloys in Test N.1**

Transmitted by the expert from the United Kingdom

**Introduction**

1. The United Kingdom expert supports the intent behind the proposal in ST/SG/AC.10/C.3/2022/66–ST/SG/AC.10/C.4/2022/17. However, the United Kingdom believes there is an alternative way to achieve harmonisation throughout the texts which would require fewer changes.
2. The United Kingdom expert has interpreted that the term “metal powders” covers powders of metals or metal alloys. The term “metal powders” is also used more frequently throughout the texts than “powders of metals or metal alloys”.

**Alternative proposal**

**Amendments to the Manual of Tests and Criteria**

3. Under the heading “33.2 Flammable solids” add the following Note (*new text in bold underlined, deleted text struck through*):

**“NOTE: The term “metal powders” covers powders of metals or metal alloys.”**

4. Amend the second sentence of 33.2.4.3.1 of the Manual as follows:

“A hot flame (minimum temperature 1 000 °C) from a gas burner (minimum diameter 5 mm) should be applied to one end of the powder train until the powder ignites or for a maximum of 2 minutes (5 minutes for ~~powders of metals or metal alloys~~ **metal powders**).”

5. Amend the second sentence of 33.2.4.4.1 of the Manual as follows:

“~~Powders of metals or metal alloys~~ **Metal powders** should be classified when they can be ignited and the reaction spreads over the whole length (100 mm) of the sample in 10 minutes or less”

6. Amend the second sentence of 33.2.4.4.2 of the Manual as follows:  
“Packing group II/Category 1 should be assigned to ~~powders of metals or metal alloys~~ **metal powders** if the zone of reaction spreads over the whole length (100 mm) of the sample in five minutes or less.”

#### **Amendments to the Model Regulations**

7. Under 2.4.2.2.1.2 add the following definition:  
“**Metal powders are powders of metals or metal alloys.**”
8. Amend the second sentence of 2.4.2.2.1 as follows:  
“~~Powders of metals or metal alloys~~ **Metal powders** shall be classified in Division 4.1 when they can be ignited and the reaction spreads over the whole length of the sample in 10 minutes or less.”
9. Amend the third sentence of 2.4.2.3.1 as follows:  
“Packing group II shall be assigned to ~~powders of metal or metal alloys~~ **metal powders** if the zone of reaction spreads over the whole length of the sample in five minutes or less.”

#### **Amendments to the Globally Harmonized System of Classification and Labelling of Chemicals**

10. Under the definition of “Readily combustible solids” in 2.7.1 add the following definition:  
“**Metal powders are powders of metals or metal alloys.**”
11. Amend 2.7.2.2 as follows:  
“~~Powders of metals or metal alloys~~ **Metal powders** shall be classified as flammable solids when they can be ignited and the reaction spreads over the whole length of the sample (100 mm) in 10 min or less.”
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