

# UN/SCEGHS/13/INF.7 UN/SCETDG/31/INF.30

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## 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  
Transport of Dangerous Goods

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

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Item 10 (b) of the provisional agenda

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Item 2 (a) of the provisional agenda

### UPDATING OF THE GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION AND LABELLING OF CHEMICALS (GHS)

#### Physical hazards

#### Open issues regarding desensitized explosives not yet properly addressed in the GHS

#### Transmitted by the expert from Germany

#### **Introduction**

1. Based on the report of the working group on explosives (informal document UN/SCETDG/29/INF.65) the Sub-Committee TDG concluded in its report of the 29<sup>th</sup> session (working document ST/SC/AC.10/C.3/58) that three possible solutions for addressing the open issue of desensitized explosives in the GHS exist (a further solution of continuing to deliberately classify these substances inappropriately was rejected by the Sub-Committee):

- Making no change;
- Creating a new chapter in Part 2 of the GHS for desensitized explosives;
- Creating a new Division 1.7 (in the class of explosives in the GHS).

2. The Sub-Committee GHS took note of the three possible solutions identified by the Sub-Committee of Experts on the Transport of Dangerous Goods to the problem of classification of desensitized explosives: (1) make no changes; (2) create a new chapter in Part 2 to deal with desensitized explosives; and (3) create a new Division 1.7.

#### **Further proceeding**

3. Based on this starting point Germany would like to introduce some considerations for possible solutions for the classification of desensitized explosives which could be discussed by the working group on explosives.

4. As it was already concluded that desensitized explosives are not covered appropriately by the GHS, the first solution "Make no changes" (and leave it to national legislation) is not considered to be a solution which is in the interest of global harmonization.

5. Therefore, a solution for the correct classification and appropriate hazard communication for desensitized explosives in the GHS should be worked out. An adequate procedure or decision logic, respectively, for the classification of desensitized explosives could be based on tests which are already part of the UN Manual of Tests and Criteria.

### **Outline of some principles**

6. In order to structure possible discussions and in order to facilitate the drafting of a first proposal, possible scenarios and principles are discussed in the following:

- (a) If a mixture of a substance, which is classified as an explosive and is diluted with a solid or liquid substance, still fulfils the criteria for the class of explosives, it has to be classified as such.

These mixtures are not under discussion here.

- (b) If a mixture of substance, which is classified as an explosive and is diluted with a solid or liquid substance, no longer fulfils the criteria for the class of explosives, it shall be (provisionally) considered as desensitized explosive.

In the current provisions for the transport of dangerous goods such mixtures are classified as liquid desensitized explosives in class 3 (flammable liquid) or as solid desensitized explosives in division 4.1 (flammable solids) based on a listing principle in the Dangerous Goods List or in an N.O.S. entry in connection with special provisions referring to appropriate test methods of the UN Manual of Test and Criteria, e.g. the UN gap test).

Need for action currently exists only for the GHS.

- (c) At this point a decision logic for the GHS could be worked out that includes tests for the explosive properties (e.g. heating under confinement, explosive power). This decision logic could also bear in mind the preliminary tests for explosive properties as proposed in TDG and GHS working document ST/SG/AC.10/C.3/2007/10 and ST/SG/AC.10/C.4/2007/1.

7. Furthermore the phlegmatizer and its mixture with the explosive substance have to meet certain requirements which aim at preventing concentration of the mixture and therefore of becoming "non-desensitized" again. These requirements have to be considered for a new class of desensitized explosives as well.

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