



**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****Fifty-ninth session**

Geneva, 29 November-8 December 2021

Item 2 (i) of the provisional agenda

Explosives and related matters: miscellaneous**Amendment and correction to the Manual of Tests and
Criteria****Submitted by the Chair of the Working Group on Explosives*****Introduction**

1. During the work on the revision of Test Series H it was noted that in the specifications of silicone oil the density was given without units (see paragraphs 28.3.6 and 28.4.2.3.1 (a)). The ad hoc working group advised to include the unit. It was also noted that the same silicone oil is used in the Koenen test when calibrating the heating rate.
2. During the online session of the working group on explosives (14 to 16 and 18 June 2021) this issue was discussed. The group recommended to include the unit g/cm^3 .
3. Furthermore, when going through the Manual of Tests and Criteria a member of the working group noted a mistake in two equations in Appendix 10, paragraph A10.2.3.8. The equations now assume that always a mass of 1 gram nitrocellulose is used in the analysis, whereas the test description also mention amounts of 2 and 3 grams. The equations should be corrected accordingly. It should be noted that in section A10.2.4.1 the criterion is expressed in ml/g, so the proposed change is consistent with the criterion.
4. Both corrections are addressed in the report of the working group including proposals.
5. However, since there was no written document on these two issues, the Sub-Committee requested the chair of the working group to address these two corrections in a document for the fifty-ninth session.

* A/75/6 (Sect.20), para. 20.51

Proposals

Proposal 1

6. Specification of silicone oil: In sections 11.5.1.2.2 (1 (b) test), 12.5.1.2.2 (2 (b) test), 18.6.1.2.2 (8 (c) test), 25.4.1.2.2 (test E.1), 25.4.2.2.2 (test E.2), 28.3.6 (test series H), 28.4.2.3.1 (test H.2) amend the specification as follows (deleted text in strikethrough and new text in bold):

“... ~~apparent~~ density $0.96 \pm 0.02 \text{ g/cm}^3$ at 20 °C...”

Proposal 2

7. Appendix 10:

In A10.2.3.8, delete the last part of the equation “= $C_{\text{NaOH}} \times 0.224$ ” as follows:

$$V_{\text{NO}} = \frac{C_{\text{NaOH}} \times C_{\text{NaOH}} \times V_{\text{NO,m}}}{m_{\text{NC}}} = \frac{C_{\text{NaOH}} \times 0.224}{m_{\text{NC}}} ~~= C_{\text{NaOH}} \times 0.224~~$$

Replace the next equation as follows:

$$~~V_{\text{NO}} = C_{\text{NaOH}} \times 2.2~~ \quad V_{\text{NO}} = \frac{C_{\text{NaOH}} \times 2.24}{m_{\text{NC}}}$$
