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

16 June 2021

Sub-Committee of Experts on the Transport of Dangerous Goods

Fifty-eighth session

Geneva, 28 June-2 July 2021

Item 6 (b) of the provisional agenda

Miscellaneous proposals for amendments to the Model Regulations

on the Transport of Dangerous Goods: packagings including the use of recycled plastics material

Comment on ST/SG/AC.10/C.3/2021/20 - Testing the non-combustibility related to packages for lithium batteries

Transmitted by the expert from Sweden

Introduction

1. Sweden would like to thank Belgium for submitting document ST/SG/AC.10/C.3/2021/20. We welcome the proposal aiming to clarify the requirements on non-combustibility of the thermal insulation material and the cushioning material. Furthermore, we are also supportive to the inclusion of standard ISO 1182 in the notes to the four packing instructions as proposed.

2. However, standard ISO 1182 only refers to how testing should be carried out and there are no actual acceptance criteria of the non-combustibility. We believe it might be appropriate to also include such criteria together with the inclusion of standard ISO 1182. According to the IMO Resolution MSC. 307(88) "INTERNATIONAL CODE FOR APPLICATION OF FIRE TEST PROCEDURES, 2010" ("2010 FTP CODE")¹, the determining of the non-combustibility for materials is carried out in accordance with ISO 1182, and on page 13 in the FTP CODE, there is a list of acceptance criteria that could be incorporated into the UN Model Regulations, where requirements on non-combustibility are stated.

3. In addition, there are further packing instructions where the requirement concerning non-combustible cushioning material is stated. However, in these places there is no requirement for a competent authority approval of a standard. We wonder if it would be suitable to also insert a reference to standard ISO 1182 in these packing instructions as well, together with acceptance criteria.

4. The following packing instructions contain requirements about non-combustible cushioning material:

- - P115, PP53 and PP54;
- - P301 (1) and (2);
- - P400 (2) and (3);
- - P405 (1)(a)(ii);
- - (P520, Additional requirements, point 3 ("not be readily combustible" is stated));
- - P909, Additional requirements, points 2 and 3;
- - P911, Footnote a (b);
- - LP906, Footnote a (b).

¹ [https://wwwcdn.imo.org/localresources/en/KnowledgeCentre/IndexofIMOResolutions/MSCResolutions/MS307\(88\).pdf](https://wwwcdn.imo.org/localresources/en/KnowledgeCentre/IndexofIMOResolutions/MSCResolutions/MS307(88).pdf)

5. On the other hand, another alternative is to move in the opposite direction. Then the requirement for an approved standard concerning non-combustibility in P908 5., P910 (1)(e), P910 (2)(d), LP904 5., LP905 (1)(e) and LP905 (2)(d) could be deleted and the text would instead be aligned with the text in the packing instructions listed in paragraph 4 above.

Discussion

6. The expert from Sweden would like to hear the views from the Sub-Committee concerning:

- If acceptance criteria should be included, which are in line with the “2010 FTP CODE” (see excerpt from the “2010 FTP CODE”), into the UN Model Regulations in the relevant packing instructions or preferably as a general text, if ISO 1182 is inserted in the packing instructions as proposed by Belgium:

“Acceptance criteria of non-combustibility

Materials to be classified as non-combustible shall satisfy the following criteria:

1. *the average furnace thermocouple temperature rise as calculated in paragraphs 8.4 and 8.5 of the appendix does not exceed 30°C;*
2. *the average specimen surface thermocouple temperature rise as calculated in paragraphs 8.4 and 8.5 of the appendix does not exceed 30°C;*
3. *the average duration of sustained flaming as calculated in paragraph 8.3 of the appendix does not exceed 10 s; and*
4. *the average mass loss as calculated in paragraph 8.2 of the appendix does not exceed 50%.”*

These acceptance criteria would have to be adjusted in accordance with ISO 1182 to obtain the correct references and requirements.

- If a reference to standard ISO 1182 should be inserted in all packing instructions containing requirements about non-combustibility.
- If the requirement for a competent authority approval of a standard concerning non-combustibility should be removed from packing instructions P908 5., P910 (1)(e), P910 (2)(d), LP904 5., LP905 (1)(e) and LP905 (2)(d).
