



**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****Thirty-ninth session**

Geneva, 20–24 June 2011

Item 3 (b) of the provisional agenda

Listing, classification and packing:**classification of Class 3 viscous liquids in Packing Group III****Classification of Class 3 viscous liquids in packing group III****Transmitted by the International Air Transport Association (IATA)¹****Introduction**

1. At the thirty-eighth session of the Sub-Committee IATA submitted a paper (ST/SG/AC.10/C.3/2010/46) that proposed certain changes to address inconsistencies between the Model Regulations and the Manual of Tests and Criteria for viscous flammable liquids such as paints, enamels, lacquers, varnishes, adhesives and polishes.
2. In response to some of the proposals contained in the IATA the European Council of the Paint, Printing Ink and Artists Colours Industry (CEPE) submitted informal document INF.6 that supported addressing the inconsistencies, but did not support some of the IATA proposals. Based on the discussion it was decided that the problem did not require an immediate response and that there would be a correspondence working group with a proposal to be submitted to this meeting of the Sub-Committee.
3. There was very limited response to the request for comment on the issues raised and therefore the proposals in this paper follow closely that originally submitted in paper 2010/46, but with revisions based on comments received and the concerns raised by CEPE in informal document INF.6.

¹ In accordance with the programme of work of the Sub-Committee for 2011-2012 approved by the Committee at its fifth session (refer to ST/SG/AC.10/C.3/68, para. 118 (a) and ST/SG/AC.10/36, para. 14).

4. The basic issue remains that there are inconsistencies between the relevant text in the Model Regulations in paragraphs 2.3.2.2 to 2.3.2.5 and that in paragraphs 32.3.1.6 and 32.3.1.7 in the Manual of Tests and Criteria.
5. The main inconsistency is the properties of the viscous substance or any separated solvent where it is believed that the text in the Model Regulations is correct with respect to the mixture or separated solvent not meeting the criteria for Division 6.1 or Class 8, and the text in the Manual of Tests and Criteria should be deleted.
6. The other issue is the condition set out in paragraph 32.3.1.7 in the Manual of Tests and Criteria permitting the assignment of these viscous flammable liquids into Packing Group III, which is that the capacity of the receptacle used does not exceed 450 litres. This condition is completely absent from the relevant paragraph in the Model Regulations, and consequently does not appear in ADR, although both the IMDG Code and the ICAO Technical Instructions do limit the capacity of the receptacle, but to 30 litres.
7. The absence of the 450 litres limit in the Model Regulations, and consequently in ADR means that consignors have been shipping viscous flammable liquids assigned to Packing Group III on the basis of the conditions set out in paragraphs 2.3.2.2 and 2.3.2.3 in receptacles with a capacity of greater than 450 litres. The Sub-Committee is invited to consider if, based on the apparent lack of incidents, the 450 litres limit has validity or not.
8. Finally, it has been suggested that text specifying requirements should only be in the Model Regulations, and text relating to test equipment and procedures should be in the Manual and of Tests and Criteria and any duplication of text should be avoided. On that basis it is proposed that the table specifying the flow time based on flash point and jet diameter should be moved from the Manual of Tests and Criteria to the Model Regulations and text in the Manual of Tests and Criteria that is duplicated with that in the Model Regulations be deleted from the Manual. Of note is that this table is already included in all of the modal regulations.

Proposal

9. Revise paragraphs 2.3.2.2, 2.3.2.3 and 2.3.2.5 as follows:

2.3.2.2 Viscous ~~substances~~ flammable liquids such as paints, enamels, lacquers, varnishes, adhesives and polishes having a flash point of less than 23 °C may be placed in packing group III in conformity with the procedures prescribed in the *Manual of Tests and Criteria*, Part III, sub-section 32.3, ~~on the basis of provided that:~~

- (a) The viscosity ~~expressed as the flowtime in seconds~~ and flash point are in accordance with the following table:

<i>Flow-time t in seconds</i>	<i>Jet diameter (mm)</i>	<i>Flash point, closed-cup (°C)</i>
20 < t ≤ 60	4	above 17
60 < t ≤ 100	4	above 10
20 < t ≤ 32	6	above 5
32 < t ≤ 44	6	above -1
44 < t ≤ 100	6	above -5
100 < t	6	no limit

- (b) ~~the closed-cup flash point~~ Less than 3% of the clear solvent layer separates in the solvent separation test;
- (c) ~~a solvent separation test~~ The mixture or any separated solvent does not meet the criteria for Division 6.1 or Class 8;
- [(d) The substances are packed in receptacles of not more than 450 litre capacity.]

2.3.2.3 ~~Viscous flammable liquids such as paints, enamels, lacquers, varnishes, adhesives and polishes with a flash point of less than 23 °C are included in packing group III provided that~~ Reserved.

- (a) ~~Less than 3% of the clear solvent layer separates in the solvent separation test;~~
- (b) ~~The mixture or any separated solvent does not meet the criteria for Division 6.1 or Class 8.~~

...

2.3.2.5 Viscous substances which:

- Have a flash point of 23 °C or above and less than or equal to 60 °C;
- Are not toxic, corrosive or environmentally hazardous;
- Contain not more than 20% nitrocellulose provided the nitrocellulose contains not more than 12.6% nitrogen by dry mass; and
- Are packed in receptacles of ~~less~~ not more than 450 ~~l~~ litre capacity;

...

10. Delete paragraphs 32.3.1.4 to 32.3.1.7 in the Manual of Tests and Criteria as this text is duplicated in the Model Regulations and do specify test equipment or test procedures.
