



**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-eighth session**

Geneva, 29 November–7 December 2010

Item 6 of the provisional agenda

**Miscellaneous proposals of amendments to the Model Regulations
on the Transport of Dangerous Goods****"De minimis" quantities of dangerous goods****Transmitted by the expert from Norway¹****Background**

1. At its thirty-sixth session, the Sub-Committee of Experts on the Transport of Dangerous Goods adopted the following new provisions for "de minimis" quantities:

"3.5.1 Insert a new sub-section 3.5.1.4 to read as follows:

"3.5.1.4 Excepted quantities of dangerous goods assigned to codes E1, E2, E4 and E5 are not subject to these Regulations provided that:

(a) The maximum net quantity of material per inner packaging is limited to 1 ml for liquids and gases and 1 g for solids;

(b) The provisions of 3.5.2 are met, except that an intermediate packaging is not required if the inner packagings are securely packed in an outer packaging with cushioning material in such a way that, under normal conditions of transport, it cannot break, be punctured, or leak its contents; and for liquid dangerous goods, the outer packaging contains sufficient absorbent material to absorb the entire contents of the inner packagings;

(c) The provisions of 3.5.3 are complied with; and

¹ In accordance with the programme of work of the Sub-Committee for 2009–2010 approved by the Committee at its fourth session (refer to ST/SG/AC.10/C.3/68, para. 118 (d) and ST/SG/AC.10/36, para. 14).

(d) The maximum net quantity of dangerous goods per outer packaging does not exceed 100 g for solids or 100 ml for liquids and gases."."

2. A few issues relating to “de minimis” quantities on which there was no complete agreement were discussed and agreed upon during that same session. One such issue was whether “de minimis” exceptions could be applied to dangerous goods assigned to codes E4 and E5. After a full discussion, it was agreed that indeed the “de minimis” exception was applicable to toxic substances bearing the E4 and E5 alphanumeric code.

3. The rationale behind de minimis quantity provisions, as an extension of the excepted quantities provisions, is that selected dangerous goods packed in **minute** quantities, with limitations on the quantity per inner packaging and outer package and in good quality packaging pose a negligible risk in transport compared to those same goods packed in larger volumes, and on this basis, relief from the Model Regulations could be accepted.

4. An examination of the dangerous goods which may be carried as excepted quantities in accordance with the provisions as shown in column (7b) of the dangerous goods list of Chapter 3.2, consistent with the excepted quantity provision description within the “Guiding Principles for the Development of the UN Model Regulations”, indicates the following:

<i>Code</i>	<i>Maximum quantity per inner packaging</i>	<i>Maximum quantity per outer packaging</i>
E0	Not permitted as Excepted Quantity	
E1	30g/30ml	1kg/1l
E2	30g/30ml	500g/500ml
E3	30g/30ml	300g/300ml
E4	1g/1ml	500g/500ml
E5	1g/1ml	300g/300ml

5. A comparison of the permitted “excepted quantity” provisions versus “de minimis” quantity per inner packaging indicates the following:

<i>Code</i>	<i>Maximum quantity per inner packaging for Excepted quantity</i>	<i>Maximum quantity per inner packaging for “de minimis” quantity</i>	<i>Ratio “de minimis”/Excepted qty</i>
E1	30g/30ml	1g/1ml	1/30
E2	30g/30ml	1g/1ml	1/30
E4	1g/1ml	1g/1ml	1
E5	1g/1ml	1g/1ml	1

6. It is understood that for “de minimis” provisions the maximum net quantity of material per inner packaging was limited, for simplification reason, to 1 ml for liquids and gases and 1 g for solids. Such a justification is difficult to rationalize when subjected to a closer analysis. The above table indicates that only 1/30 of the permitted excepted quantity is permitted in inner packaging as de minimis quantity for substances assigned the E1 and E2 alphanumeric code whereas those assigned the E4 and E5 code are permitted 100% the excepted quantity. The proposal appearing hereafter suggests a more gradual approach in establishing the maximum net quantity of material **per inner packaging**, while maintaining

² http://www.unece.org/trans/danger/publi/unrec/GuidingPrinciples/GuidingPrinciplesRev15_e.html,

the maximum net quantity of dangerous goods per package at the limit of 100 g for solids or 100 ml for liquids and gases.

Proposal

7. Amend new sub-section 3.5.1.4 to read as follows (new text underlined):

“3.5.1.4 Excepted quantities of dangerous goods assigned to codes E1, E2, E4 and E5 are not subject to these Regulations provided that:

- (a) The maximum net quantity of material per inner packaging is limited to 3 ml for liquids and gases and 3 g for solids assigned to code E1 or E2 and 1 ml for liquids and gases and 1 g for solids assigned to code E4 or E5;
 - (b) The provisions of 3.5.2 are met, except that an intermediate packaging is not required if the inner packagings are securely packed in an outer packaging with cushioning material in such a way that, under normal conditions of transport, it cannot break, be punctured, or leak its contents; and for liquid dangerous goods, the outer packaging contains sufficient absorbent material to absorb the entire contents of the inner packagings;
 - (c) The provisions of 3.5.3 are complied with; and
 - (d) The maximum net quantity of dangerous goods per outer packaging does not exceed 100 g for solids or 100 ml for liquids and gases.”.
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