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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****Forty-fourth session**

Geneva, 25 November – 4 December 2013

Item 5 (g) of the provisional agenda

**Miscellaneous proposals for amendments to the Model Regulations  
on the Transport of Dangerous Goods: packagings****Excepted quantity provisions regarding the use of absorbent  
and cushioning material****Transmitted by the International Council of Chemical Associations  
(ICCA)<sup>1</sup>****Introduction**

1. Using the excepted quantity provisions for some products, especially sold to physicians, dentists or consumers, a problem regarding the placement of the absorbent material has been detected. ICCA wants to stress that relaxation of the provisions is not the aim, but more flexibility to achieve the same level of safety for the packaging. Therefore alternative methods are proposed to assure that especially no liquid can escape from the packaging, if an inner packaging breaks during transport.

2. Today the cushioning material and the absorbent material need to be placed into the intermediate packaging according to 3.5.2 (b). Instead of placing the absorbent material into the intermediate packaging ICCA looks for a possibility to place it into the outer packaging instead, because the intermediate packaging is the packaging which many end-users like dentists or physicians receive with a wide variety of products shipped as excepted quantities. These customers do not want to receive the absorbent material in the packaging which they will eventually use for storage purposes and ICCA also is reluctant to add

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<sup>1</sup> In accordance with the programme of work of the Sub-Committee for 2013-2014 approved by the Committee at its sixth session (refer to ST/SG/AC.10/C.3/84, para. 86 and ST/SG/AC.10/40, para. 14).

additional packaging levels, if this is not needed to maintain the safety level of the packaging for environmental reasons.

3. During the discussion of the previous paper on this issue (ST/SG/AC.10/C.3/2013/2) several issues have been raised, which have been considered for the new proposal:

- (a) Cushioning material is needed for solids and liquids, but absorbent material is only required for liquids. Therefore the provisions need to be separated;
- (b) Different alternatives for the placement of the absorbent material should be presented and may be accepted, so that the appropriate one can be chosen;
- (c) The additional solution need to be suitable for inner packaging in all orientations in the package.

## Proposal

4. ICCA therefore proposes amending section 3.5.2 as follows (new text underlined):

### **“3.5.2 Packagings**

Packagings used for the transport of dangerous goods in excepted quantities shall be in compliance with the following:

- (a) ... (unchanged);
- (b) Each inner packaging shall be securely packed in an intermediate packaging ~~with cushioning material~~ in such a way that, under normal conditions of transport, it cannot break, be punctured or leak its contents. This may be achieved using cushioning material or appropriate packagings (like kit packaging). The intermediate packaging shall completely contain the contents In case of breakage or leakage, regardless of the package orientation, the contents shall be completely contained inside the packaging. For liquid dangerous goods, the following options are acceptable:
  - (i) The intermediate packaging shall contain sufficient absorbent material to absorb the entire contents of the inner packagings. In such cases, the absorbent material may be the cushioning material; or
  - (ii) The absorbent material may be placed in the outer packaging if it can be guaranteed that the contents will be completely contained in the outer packaging no matter what the orientation of the package; or
  - (iii) If the combination of inner packaging and intermediate packaging can withstand an additional drop test following the same procedure as prescribed in 3.5.3 for the whole package, cushioning material and/or absorbent material may be placed in the outer packaging instead of in the intermediate packaging; or
  - (iv) The intermediate packagings are placed inside a closed liner, which contains enough absorbent material to absorb the entire contents of all inner packagings. In this case the orientation of the package and no additional drop test is required.

Dangerous goods shall not react dangerously with cushioning, absorbent material and packaging material or reduce the integrity or function of the materials.

## **Justification**

5. All of the above mentioned options fulfil the requirement that in case of a leakage or breaking of the inner packagings the complete content of the inner packagings are contained inside the package and cannot escape into the environment. Some of the options in addition give the possibility to achieve this aim without adding package levels, which is prohibited in some countries based on environmental regulations.

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