

**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**

**(Twenty-fourth session, 1 – 10 December 2003
Agenda item 4(a))**

PACKAGINGS (INCLUDING IBC'S AND LARGE PACKAGINGS)

Evaluation of the United Nations packaging requirements

Establishment of a Working Group

Transmitted by the expert from the Netherlands

Introduction:

1. In the Netherlands proposal ST/SG/AC.10/C.3/2003/57, paragraph 3 it was indicated that the Netherlands will submit a detailed list identifying the technical and editorial problems regarding the UN packaging requirements by means of an informal document well in advance to the 24th session of the Sub-Committee.

2. The list of technical and editorial problems identified, as given in the Annex , consist of:

- technical and editorial errors identified in Chapter 6.1;
- differences in set-up and presentation of Chapter 6.5 (IBC's) and Chapter 6.6 (LP's) compared to Chapter 6.1, and differences between Chapter 6.5 and Chapter 6.6; and,
- inconsistencies and technical problems in Chapter 6.3 (Packagings for Division 6.2)

3. In the editorial up-date of the Model Regulations the work done for the ISO standard could be taken into account. The Netherlands do not prefer to have a reference to the standard instead of the text of the Model Regulations. However, if the standard gives a more technical specification how to fulfill specific requirements of the Model Regulations , a reference (in these specific requirements) to the standard could be considered, based on a written proposal submitted to the Sub-Committee.

Proposal:

4. The Sub-Committee is invited to consider the list of technical and editorial problems in conjunction with proposal ST/SG/AC.10/C.3/2003/57 and take action as deemed appropriate.

ANNEX

List of technical and editorial errors

1. *A number of technical and editorial errors have been identified in Chapter 6.1:*
 - It must be made clear that for a 5M2 type bag (water resistant) the purpose is to protect the inner layer(s) against moisture by avoiding moisture transport through the outer layer which is often done by using a coated layer;
 - 6.1.5.1.6 is not related to testing of packagings and is meant for the user and should thus be moved to Part 4;
 - It must be made clear for which type of packagings the maximum capacity and maximum net mass is applicable. The limits in capacity and net mass are indicated in 6.1.1.1 and in 6.1.4 for the individual packaging types, where a difference is noted between drums/jerricans (both capacity and net mass limit) and boxes/bags (only net mass limit).
2. *A number of differences in set-up and presentation of Chapter 6.5 (Intermediate Bulk Containers or IBCs) and Chapter 6.6 (Large Packagings or LPs) compared to Chapter 6.1 have been identified and should be brought in line with Chapter 6.1:*
 - Construction requirements for IBCs are given 6.5.1.5 and 6.5.3. These set of requirements should be combined into one section as in 6.1.4 for packagings;
 - All definitions are given in 1.2.1; however for IBCs additional definitions are mentioned in 6.5.1.2; these can better be included in 1.2.1;
 - Test requirements for IBCs are given in 6.5.1.6 and 6.5.4; this should be combined into one section.
3. *A number of differences have been identified between Chapters 6.5 (IBCs) and 6.6 (LPs):*
 - There are different criteria for passing the top lift test and the stacking test for LPs compared to IBCs: for rigid IBCs the permanent deformation criterion includes the base pallet in contrast with LPs and for flexible IBCs the damage criterion includes the lifting devices in contrast to LPs. This must be brought in line.

Furthermore the Netherlands propose to make the text for IBC's and LP's consistent with each other:

- The tests required for flexible IBCs include the tear test, the topple test and the righting test in contrast to the tests required for flexible LPs. This must be brought in line;
 - Testing of LPs for liquids when the test is performed with water does not allow a correction of the drop height for relative densities exceeding 1.2 in contrast to IBCs. This must be brought in line;
4. *A considerable number of inconsistencies and technical problems have been identified in Chapter 6.3 (Packagings for Division 6.2):*
 - The terminology used for the various parts of the packaging relevant for packagings for Division 6.2 substances like primary receptacle, inner receptacle, secondary packaging, intermediate packaging, inner packaging and outer packaging should be clarified;
 - It must be made clear how the drop test for packagings containing dry ice should be performed. The drop test has to be performed on one sample after dissipation of the dry ice according to a test procedure which requires 3 or 5 samples;
 - The cylindrical steel rod at the puncture test in 6.3.2.6 (a) must have a diameter not exceeding 38 mm. This value of the diameter must be better defined as was done for the steel rod in 6.3.2.6 (b);
 - There should be a provision for a selective testing procedure as given in 6.1.5.1.5 for packagings;
 - There should be a provision to perform the test procedure on one sample as given in 6.1.5.1.10 for packagings;
 - It is required that each primary receptacle shall be filled to 98% capacity. This is not practical and must be brought in line with 6.1.5.2.1 (not less than 98%);
 - There needs to be clarification on upper packaging limits;
 - There should be a provision on quality assurance as in 6.1.1.4. There should be a clarification on the marking as has been done in 6.1.3 (notes 1-3).
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