

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

30 September 2014

Sub-Committee of Experts on the Transport of Dangerous Goods

Forty-sixth session

Geneva, 1 – 9 December 2014

Item 2 (e) of the provisional agenda

Recommendations made by the Sub-Committee on its forty-third, forty-fourth and forty-fifth sessions and pending issues: miscellaneous pending issues

Leakproofness testing procedures carried out before first use and during the periodic inspection for packagings and IBCs

Corrections to ST/SG/AC.10/C.3/2014/76

Transmitted by the expert from Sweden

1. In document ST/SG/AC.10/C.3/2014/76 text from ADR/RID was inserted instead of text from the UN Model Regulations. This has been corrected in this informal paper. In the proposal under point 6 to 8 you will find the proposal showing the suggested amendments to the UN Model Regulations. Under point 9 to 11 the differences between the official document and this informal paper are shown.

Background

2. At the previous sessions of the Sub-Committee, the expert of Sweden has raised issues concerning leakproofness testing procedures carried out before first use and during the periodic inspection for packagings and IBCs in accordance with paragraphs 6.1.1.3 and 6.5.4.4. In December 2013 Sweden presented the result of a survey containing a number of questions relating to testing procedures (see informal documents submitted to the 44th session INF.18 + INF.18/Add.1 and INF.18/Add.2). Even though it was difficult to draw straightforward conclusions from the answers, the result from this survey indicated that applied test methods, test pressures and durations varied considerably depending on for example properties of packagings and IBCs, and production rate.

3. The outcome of the discussion on the Swedish documents (see paragraph 74-75 in the report ST/SG/AC.10/C.3/88), was that several delegations felt that this issue did not really present any safety problems and therefore further work was not considered necessary.

4. Bearing in mind the results of the survey and the discussion at the meeting a year ago, the expert from Sweden believes that it would be appropriate to amend 6.1.1.3 and 6.5.4.4.2 so that the leakproofness test carried out before first use and during the periodic inspection do not have to be in accordance with the leakproofness test used during type approval (6.1.5.4.3 and 6.5.6.7.3). Sweden is of the opinion that it is sufficient to state that a leakproofness test should be carried out before the first use and during the periodic inspection of IBCs, since hardly any of these tests are being performed in accordance with

the leakproofness test procedures stated in 6.5.6.7.3. For packagings, we also believe it is adequate to state that a leakproofness test should be performed before first use, remanufacturing and reconditioning without referencing to the leakproofness test procedures in 6.1.5.4.3.

5. Furthermore, there is the requirement in 4.1.1.9 which states that new, remanufactured, or reconditioned packagings and IBCs, shall be capable of passing the tests prescribed in 6.1.5 or 6.5.6. Consequently, there is always the requirement that all packagings and IBCs must be capable of passing the tests used during type approval.

6. The expert from Sweden would like to emphasize that no changes are proposed for the requirements on the leakproofness test procedures performed during the actual type approval process.

Proposal

7. In the first paragraph in 4.1.1.12, delete the reference to 6.1.5.4.3 and amend the first sentence as follows:

“4.1.1.12 Every packaging as specified in Chapter 6.1 intended to contain liquids shall successfully undergo a suitable leakproofness test, ~~and be capable of meeting the appropriate test level indicated in 6.1.5.4.3:~~

(a) Before it is first used for transport;

(b) After remanufacturing or reconditioning of any packaging, before it is re-used for transport.

For this test the packaging need not have its closures fitted. The inner receptacle of a composite packaging may be tested without the outer packaging, provided the test results are not affected. This test is not necessary for inner packagings of combination packagings or large packagings.”

8. In the first paragraph in 6.1.1.3 delete the reference to 6.1.5.4.3 and amend the first sentence as follows:

“6.1.1.3 Every packaging intended to contain liquids shall successfully undergo a suitable leakproofness test, ~~and be capable of meeting the appropriate test level indicated in 6.1.5.4.3:~~

(a) Before it is first used for transport;

(b) After remanufacturing or reconditioning, before it is re-used for transport.

For this test, packagings need not have their own closures fitted.

The inner receptacle of composite packagings may be tested without the outer packaging provided the test results are not affected. This test is not necessary for inner packagings of combination packagings.”

9. In the first paragraph in 6.5.4.4.2 delete the reference to 6.5.6.7.3 and amend the first sentence as follows:

“6.5.4.4.2 Every metal, rigid plastics and composite IBC for liquids, or for solids which are filled or discharged under pressure, shall undergo a suitable leakproofness test ~~at least equally effective as the test prescribed in 6.5.6.7.3 and be capable of meeting the test level indicated in 6.5.6.7.3:~~

(a) Before it is first used for transport;

(b) At intervals of not more than two and a half years.

For this test the IBC shall be fitted with the primary bottom closure. The inner receptacle of a composite IBC may be tested without the outer casing, provided that the test results are not affected.”

The differences between the official document ST/SG/AC.10/C.3/2014/76 and this informal paper are shown below:

10. In the first paragraph in 4.1.1.12, delete the reference to 6.1.5.4.3 and amend the first sentence as follows:

“4.1.1.12 Every packaging as specified in Chapter 6.1 intended to contain liquids shall successfully undergo a suitable leakproofness test, ~~and be capable of meeting the appropriate test level indicated in 6.1.5.4.3:~~

(a) ~~before~~Before it is first used for ~~earriage~~transport;

(b) ~~after~~After remanufacturing or reconditioning of any packaging, before it is re-used for ~~earriage~~transport.

For this test the packaging need not have its closures fitted. The inner receptacle of a composite packaging may be tested without the outer packaging, provided the test results are not affected. This test is not ~~required~~necessary for: inner packagings of combination packagings or large packagings.”

~~inner packagings of combination packagings or large packagings;~~

~~inner receptacles of composite packagings (glass, porcelain or stoneware) marked with the symbol "RID/ADR" in accordance with 6.1.3.1 (a) (ii);~~

~~light gauge metal packagings marked with the symbol "RID/ADR" in accordance with 6.1.3.1 (a) (ii).”~~

11. In the first paragraph in 6.1.1.3 delete the reference to 6.1.5.4.3 and amend the first sentence as follows:

“6.1.1.3 Every packaging intended to contain liquids shall successfully undergo a suitable leakproofness test, ~~and be capable of meeting the appropriate test level indicated in 6.1.5.4.3:~~

(a) Before it is first used for ~~earriage~~transport;

(b) After remanufacturing or reconditioning, before it is re-used for ~~earriage~~transport.

For this test, packagings need not have their own closures fitted.”

The inner receptacle of composite packagings may be tested without the outer packaging provided the test results are not affected. This test is not necessary for inner packagings of combination packagings.”

~~This test is not necessary for:~~

~~Inner packagings of combination packagings;~~

~~Inner receptacles of composite packagings (glass, porcelain or stoneware), marked with the symbol "RID/ADR" according to 6.1.3.1 (a) (ii);~~

~~Light gauge metal packagings, marked with the symbol "RID/ADR" according to 6.1.3.1 (a) (ii).”~~

12. In the first paragraph in 6.5.4.4.2 delete the reference to 6.5.6.7.3 and amend the first sentence as follows:

“6.5.4.4.2 Every metal, rigid plastics and composite IBC for liquids, or for solids which are filled or discharged under pressure, shall undergo a suitable leakproofness test ~~at least equally effective as the test prescribed in 6.5.6.7.3 and be capable of meeting the test level indicated in 6.5.6.7.3.~~

- (a) Before it is first used for earriagetransport;
- (b) At intervals of not more than two and a half years.

For this test the IBC shall be fitted with the primary bottom closure. The inner receptacle of a composite IBC may be tested without the outer casing, provided that the test results are not affected.”.
