

## 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

20 June 2024

### Sixty-fourth session

Geneva, 24 June-3 July 2024

Item 6 (b) of the provisional agenda

### Miscellaneous proposals for amendments to the Model Regulations on the Transport of Dangerous Goods:

Packagings, including the use of recycled plastics material

## Request for clarification on the periodic leakproofness re-testing on IBCs after two and a half years

Transmitted by the expert from Germany

### I. Introduction

1. Based on several discussions within the Sub-Committee in 2013 and 2014 on the initial and periodic leakproofness testing of IBCs the following consensus was reached during the forty-sixth session (see document [ST/SG/AC.10/C.3/92](#), paragraph 43): “*The production leak test does not necessarily have to comply with the design type test. However, samples taken from the production are expected to meet the design requirements.*”
2. This consensus is related to a “*statistical sampling for verification*” as stated in informal document INF.43 of the forty-sixth session (see [informal document INF.43](#)). The sampling is part of the quality assurance programme which shall satisfy the competent authority as regulated in 6.5.4.4.2 in connection with 6.5.4.1.
3. As the consensus seems to be related to the initial testing only as it refers to the production, we seek additional clarification on the periodic re-testing of the leakproofness of IBCs.

### II. Discussion

4. While statistical sampling can be well applied to the initial testing before first use (e.g. by testing one virgin, i.e. unused, IBC of a given design type at a fixed interval), it seems to be less straightforward to define a sampling frequency for the periodic re-testing, i.e. after the IBCs are in use for up to two and a half years, because different design types will be mixed during periodic leakproofness re-testing and the behaviour of one design type does not allow conclusions to be drawn about the behaviour of other design types.
5. With reference to the definition of *routine maintenance of rigid IBCs* in 1.2.1, one might also take into account that rigid IBCs are usually tested several times for leaktightness before they need to undergo periodic re-testing after two and a half years.
6. For standard composite IBCs (outer casing made of steel rods) it is known that testing at the level of the design type test (20 kPa, 10 minutes, see 6.5.6.7.3) will result in permanent deformation of the outer casing as well as the inner receptacle. If a routine maintenance company has purchased such IBCs, the deformation after periodic leakproofness testing in accordance with 6.5.6.7.3 will render the IBCs unsellable even if such IBCs might be still safe for transport.
7. After being in use for 5 years or less (see 4.1.1.15) used rigid plastics IBCs shall no longer be used and inner receptacles of composite IBCs need to be removed from the outer casing, which means that in maximum a single periodic re-testing will be carried out within the life span of a rigid plastics IBC and the inner receptacle of a composite IBC respectively.

### **III. Request**

8. The Sub-Committee is invited to share their views on this topic, i.e., whether it might be deemed sufficient or not to skip the sample testing at the level of the design type test for the periodic leakproofness re-testing after two and a half years for all IBC types or at least some IBC types (see paragraphs 6 and 7 above).

### **IV. Support of the Sustainable Development Goals**

9. This document is aimed at supporting Sustainable Development Goal target 16.6 – *“Develop effective, accountable and transparent institutions at all levels of the UN Agenda 2030 by promoting the clear and consistent application of the Model Regulations.”*

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