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Joint Meeting of the RID Committee of Experts and the Working Party on the Transport of Dangerous Goods

Ad hoc Working Group on the Harmonization of RID/ADR/ADN with the UN Recommendations on the Transport of Dangerous Goods

Geneva, 21-23 April 2021

Harmonization with the United Nations Model Regulations on the Transport of Dangerous Goods-Recycled plastics material

Proposal 1

Chapter 1.2

1.2.1 Modify the definition of Recycles plastics materials to read as follows (completely harmonizing with the Model Regulations edition 22). The phrase "large packagings" is placed in square brackets since it is not yet permitted to use recycled material for large packagings:

Recycled plastics material means material recovered from used industrial packagings that has been cleaned and prepared for processing into new packagings. The specific properties of the recycled material used for production of new packagings shall be assured and documented regularly as part of a quality assurance programme recognized by the competent authority. The quality assurance programme shall include a record of proper pre-sorting and verification that-recycled plastics material has the proper melt flow rate, density, and tensile yield strength, consistent with that of the design type manufactured from such recycled material. This necessarily includes knowledge about the packaging material from which the recycled plastics have been derived, as well as awareness of the prior contents of those packagings if those prior contents might reduce the capability of new packagings produced using that material. In addition, the packaging manufacturer's quality assurance programme under 6.1.1.4 shall include performance of the mechanical design type test in 6.1.5 on packagings manufactured from each batch of recycled plastics material. In this testing, stacking performance may be verified by appropriate dynamic compression testing rather than static load testing.

NOTE: ISO 16103:2005 "Packaging-Transport packages for dangerous goods-Recycled plastics material", provides additional guidance on procedures to be followed in approving the use of recycled plastics material. These guidelines have been developed based on the experience of the manufacturing of drums and jerricans from recycled plastics material and as such may need to be adapted for other types of packagings, IBCs [and large packagings] made of recycled plastics material.

Proposal 2

Chapter 6.1

Delete 6.1.4.13.7 and 6.1.4.8.8, as they are covered now by 1.2.1:

6.1.4.8.8 "Deleted"

6.1.4.13.7 "Deleted"

Proposal 3

Modify 6.1.4.13.1 by inserting provisions concerning residues that are missing for the plastic boxes, but are existing provisions for the plastic jerricans and drums. After the first sentence, insert the same sentence as the second sentence of 6.1.4.8.1:

6.1.4.13.1 After the first sentence, add the following new sentence: "Except for recycled plastics material as defined in 1.2.1, no used material other than production residues or regrind from the same manufacturing process may be used.".

Proposal 4

Chapter 6.5

Add 6.5.2.1.2 as proposed by the Secretariat in document/HAR/2021/1 for introducing the REC mark:

6.5.2.1.2 Add a new 6.5.2.1.2 to read as follows (similar as in 6.1.3.10):

"6.5.2.1.2 IBCs manufactured from recycled plastics material as defined in 1.2.1 shall be marked "REC". For rigid IBCs this mark shall be placed near the marks prescribed in 6.5.2.1.1. For the inner receptacle of composite IBCs, this mark shall be placed near the marks prescribed in 6.5.2.2.4."

Renumber current 6.5.2.1.2 and 6.5.2.1.3 as 6.5.2.1.3 and 6.5.2.1.4.

Proposal 5

Add in 6.5.5.3.2 and 6.5.5.4.6 provisions concerning residues as proposed by the Secretariat in document/HAR/2021/1 (similar to 6.1.4.8.1 and 6.1.4.13.1), and deleting them from 6.5.5.3.5, as the provisions there are not referencing 1.2.1:

6.5.5.3.2 After the first sentence, add the following new sentence: "Except for recycled plastics material as defined in 1.2.1, no used material other than production residues or regrind from the same manufacturing process may be used.".

6.5.5.3.5 "Deleted"

6.5.5.4.6 After the first sentence, add the following new sentence: "Except for recycled plastics material as defined in 1.2.1, no used material other than production residues or regrind from the same manufacturing process may be used.".

Consequential

Changes to insert provisions for the use of recycled materials as proposed by the Secretariat in document/HAR/2021/1 for 6.5.4.6 are not needed any more, since they are covered by 1.2.1.

Annex

In regards to 1.2.1, here the necessary changes can be seen in track mode:

Recycled plastics material means material recovered from used industrial packagings that has been cleaned and prepared for processing into new packagings. The specific properties of the recycled material used for production of new packagings shall be assured and documented regularly as part of a quality assurance programme recognized by the competent authority. The quality assurance programme shall include a record of proper pre-sorting and verification that each batch of recycled plastics material has the proper melt flow rate, density, and tensile yield strength, consistent with that of the design type manufactured from such recycled material. This necessarily includes knowledge about the packaging material from which the recycled plastics have been derived, as well as awareness of the prior contents of those packagings if those prior contents might reduce the capability of new packagings produced using that material. In addition, the packaging manufacturer's quality assurance programme under 6.1.1.4 shall include performance of the mechanical design type test in 6.1.5 on packagings manufactured from each batch of recycled plastics material. In this testing, stacking performance may be verified by appropriate dynamic compression testing rather than static load testing.

NOTE: ISO 16103:2005 "Packaging-Transport packages for dangerous goods-Recycled plastics material", provides additional guidance on procedures to be followed in approving the use of recycled plastics material. These guidelines have been developed based on the experience of the manufacturing of drums and jerricans from recycled plastics material and as such may need to be adapted for other types of packagings, IBCs [and large packagings] made of recycled plastics material.