



Last 5 years at ICPP

28th September 2023 | International Industrial Packaging Conference



ICPP International Confederation of Plastics Packaging Manufacturers



The association's commitment is to improve the frame conditions for the international transport of dangerous goods in plastics packaging and to encourage environmentally sound practices in the management of the packaging life cycle.

Enabling the use of recycled plastics material in IBCs

Use of recycled plastics material in IBCs



6.5.5.4 Specific requirements for composite IBCs with plastics inner receptacles

6.5.5.4.6 The inner receptacle shall be manufactured from suitable plastics material of known specifications and be of adequate strength in relation to its capacity and its intended use. 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. The material shall be adequately resistant to ageing and to degradation caused by the substance contained or, where relevant, by ultraviolet radiation. Low temperature performance shall be taken into account when appropriate. Any permeation of the substance contained shall not constitute a danger under normal conditions of transport.

~~6.5.5.4.9 No used material other than production residues or regrind from the same manufacturing process may be used in the manufacture of inner receptacles.~~

How long will it take for the amendments to come into effect?



56 session
Dec 2019

22 revised edition
Jan 2021

Jan 2023

United Nations ST/SG/AC.10/C.3/2019/...
 **Secretariat**
Distr.: General
XX August 2019
Original: English

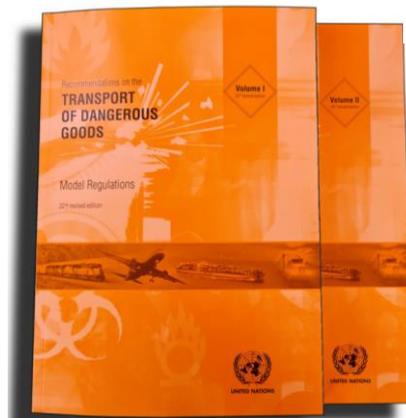
Committee of Experts on the Transport of Dangerous Goods
and on the Globally Harmonized System of Classification
and Labelling of Chemicals

Sub-Committee of Experts on the Transport of Dangerous Goods:

Fifty-sixth session
Geneva, 2-11 December 2019
Item ... of the provisional agenda
Listing, classification and packaging

Use of recycled plastics material – expansion to all rigid
plastics packagings, and plastics large packagings

Transmitted by the International Confederation of Plastics Packaging
Manufacturers (ICPP)



Use of recycled plastics material in dangerous goods packaging

Virgin vs. recycled material



Prevalent opinion among the population

Virgin plastics

=



Recycled plastics

=



Virgin vs. recycled material



Prevalent opinion among the population

Virgin plastics

=



Recycled plastics

=



Virgin vs. recycled material



Use of recyclate must not have a significant or safety-relevant influence on the use

Virgin plastics

=

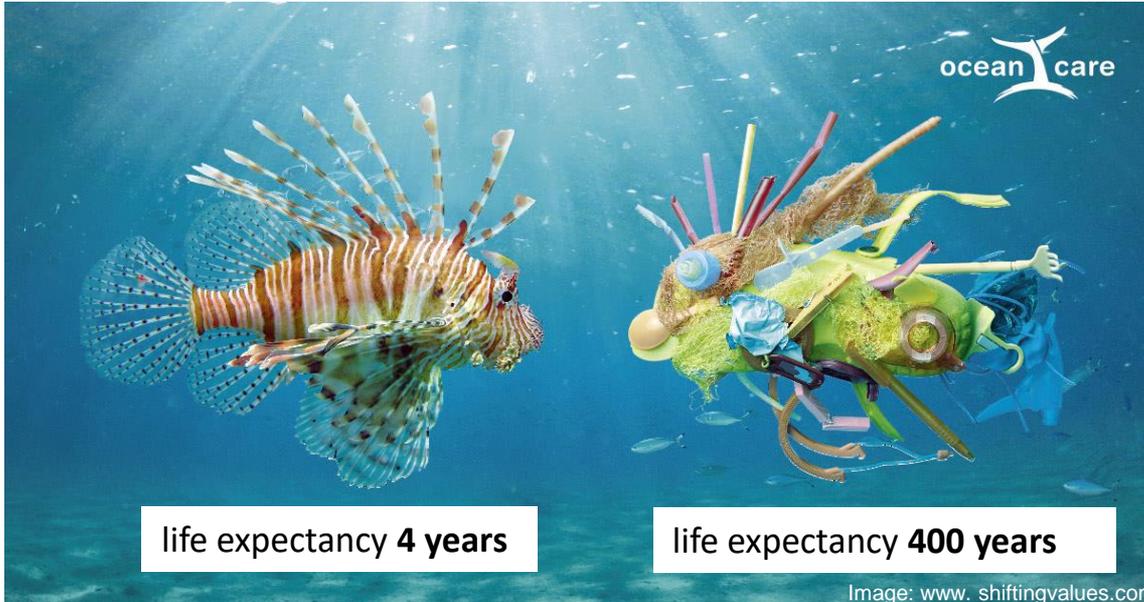


Recycled plastics

=



Lifetime of plastics



Tests during the use of recycled material according to UN model regulations



Plastic recyclate		Packaging from recyclate	
Test	Frequency	Tests	Frequency
Melt index	batchwise*	Desing type test	<u>batchwise*</u>
Density			
Tensile strength			

*means according to ISO 16103 every 25t

Joint proposal Belgium, ICIBCA and ICPP (2022)



“Recycled plastics material means material recovered from used industrial packagings or from other plastics material that has been cleaned-pre-sorted and prepared for processing into new packagings, including IBCs. The specific properties of the recycled material used for production of new packagings, including IBCs, 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, which is of homogeneous composition, has the proper melt flow rate, density, and tensile yield strength, is consistent with that the material specifications (melt flow rate, density, and tensile property) of the design type manufactured from such recycled material. This necessarily includes knowledge ...

Joint proposal Belgium, ICIBCA and ICPP (2022)



... manufactured from such recycled material. This necessarily includes knowledge about the ~~packaging material~~ plastics material from which the recycled plastics have been derived, as well as awareness of the prior use, including prior contents, of ~~those packagings~~ the plastics material if ~~those prior contents~~ that prior use might reduce the capability of new packagings, including IBCs, produced using that material. In addition, the packaging or IBC manufacturer's quality assurance programme under 6.1.1.4 or 6.5.4.1 shall include performance of the appropriate mechanical design type tests in 6.1.5 or 6.5.6 on packagings or IBCs, 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.

What is the source of the material



Adapt tests in the use of recyclate on the basis of experience



Plastic recyclate		Packaging from recyclate	
Tests	Frequency	Tests	Frequency
Melt index	batch (25 t)	Type tests	<u>as new</u>
Density			



Maintain batch tests to ensure the properties of the recyclate! Also for countries without experience

Reduction of testing frequencies on the packaging with recyclates, as the properties are secured and experience has shown that safety is thereby ensured.

1997



2022

**CHEERS TO
25 YEARS**

New president since May 2023



**Phil Zamperin (Greif)
PDI (Plastic Drum Institute)**

Other projects



- PPWR
- PFAS restriction proposal
- Revision of ISO 16103
Packaging — Transport packaging for dangerous goods — Recycled plastics material
- IEC WD 61340-4-11
Standard test methods for specific applications – Testing of 56 electrostatic properties of composite IBC

Thank you



Torben Knoess
- General Secretary -

ICPP

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