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ISO 16103:2005
Reconfirmed 2018

Australian Standard®

Transport packaging for dangerous goods—Recycled plastics material



This Australian Standard® was prepared by Committee CH-009, Safe Handling of Chemicals.
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The following are represented on Committee CH-009:

- ACCORD Australia
- Agsafe
- Australasian Fire Authorities Council
- Australian Institute of Petroleum
- Australian Paint Manufacturers' Federation
- Consumers Federation of Australia
- Department of Consumer and Employment Protection, WA
- Department of Emergency Services, Qld
- Department of Environment and Conservation, NSW
- Department of the Premier and Cabinet, SA
- Engineers Australia
- New Zealand Chemical Industry Council
- Plastics and Chemicals Industries Association
- Tranz Rail (New Zealand)
- Victorian WorkCover Authority

This Standard was issued in draft form for comment as DR 07263.

Standards Australia wishes to acknowledge the participation of the expert individuals that contributed to the development of this Standard through their representation on the Committee and through the public comment period.

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STANDARDS AUSTRALIA

RECONFIRMATION

OF

AS ISO 16103–2007

Transport packaging for dangerous goods – Recycled plastics material

RECONFIRMATION NOTICE

Technical Committee CH-009 has reviewed the content of this publication and in accordance with Standards Australia procedures for reconfirmation, it has been determined that the publication is still valid and does not require change.

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Approved for reconfirmation in accordance with Standards Australia procedures for reconfirmation on 2 May 2018.

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NOTES

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PREFACE

This Standard was prepared by Standards Australia/Standards New Zealand Committee CH-009, Safe Handling of Chemicals. It is identical with, and has been reproduced from, ISO 16103:2005, *Packaging—Transport packaging for dangerous goods—Recycled plastics material*.

After consultation with stakeholders in both countries, Standards Australia and Standards New Zealand decided to develop this Standard as an Australian Standard rather than an Australian/New Zealand Standard.

As this Standard is reproduced from an international standard, the following applies:

(a) Its number appears on the cover and title page while the international standard number appears only on the cover.

(b) The words 'this International Standard' should be replaced with 'this Australian Standard' wherever they appear.

(c) A full point substitutes for a comma when referring to a decimal marker.

(d) The additional note should be added to Clause 4:

This includes knowledge of 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 from that material.

(e) The additional note should be added to Clause 5.3.7 as follows:

The United Nations *Recommendations on the Transport of Dangerous Goods—Model Regulations* specify that no used material, other than production residues or regrind from the same manufacturing process, may be used in the manufacture of rigid plastics intermediate bulk containers (IBCs).

References to International Standards should be replaced by references to Australian Standard, as follows:

Reference to International Standard		*Australian Standard*	
ISO		AS	
527	Plastics—Determination of tensile properties	1145	Determination of tensile properties of plastics materials
527-1	Part 1: General principles	1145.1	Part 1: General principles
527-2	Part 2: Test conditions for moulding and extrusion plastics	1145.2	Part 2: Test conditions for moulding and extrusion plastics
12048	Packaging—Complete, filled transport packages—Compression and stacking tests using a compression tester	2582	Complete, filled transport packages—Methods of test
		2582.10	Method 10: Compression and stacking tests using a compression tester
		AS ISO	
16101	Packaging—Transport packaging for dangerous goods—Plastics compatibility testing	16101	Transport packaging for dangerous goods—Plastics compatibility testing
16104	Packaging—Transport packaging for dangerous goods—Test methods	16104	Transport packaging for dangerous goods—Test methods

16106	Packaging—Transport packages for dangerous goods—Dangerous goods packagings, intermediate bulk containers (IBCs) and large packagings—Guidelines for the application of ISO 9001	16106	Transport packages for dangerous goods—Dangerous goods packagings, intermediate bulk containers (IBCs) and large packagings—Guidelines for the application of ISO 9001

Only references that have been adopted as Australian Standards have been listed.

The terms ‘normative’ and ‘informative’ have been used in this Standard to define the application of the annex to which they apply. A ‘normative’ annex is an integral part of a Standard, whereas an ‘informative’ annex is only for information and guidance.

INTRODUCTION

The aim of this International Standard is to specify sufficiently the necessary controls for the use of recycled plastics materials as identified in the *United Nations Recommendations on the Transport of Dangerous Goods*, by selection into batches. Packagings produced from each batch of recycled plastics material undergo mechanical testing as in design type testing.

These Recommendations are given legal entity by the provisions of a series of modal agreements for the international transport of dangerous goods:

— the *European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR)* (see [1] in the Bibliography);

— the International Civil Aviation Organization's *Technical Instructions for the Safe Transport of Dangerous Goods by Air* (see [2] in the Bibliography);

— the *International Maritime Dangerous Goods Code* (see [3] in the Bibliography);

— the *Regulations concerning the International Carriage of Dangerous Goods by Rail (RID)* (see [4] in the Bibliography).

The application of this International Standard needs to take account of the requirements of these international agreements and the relevant national regulations for domestic transport of dangerous goods.

AUSTRALIAN STANDARD

Transport packaging for dangerous goods—Recycled plastics material

1 Scope

This International Standard specifies the requirements and test methods for the production of recycled plastics materials to be used for packagings for the transport of dangerous goods. This includes guidance on the quality assurance programme.

NOTE The quality assurance programme for the production of packagings is described in ISO 16106 (see [5] in the Bibliography).

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 527-1, *Plastics — Determination of tensile properties — Part 1: General principles*

ISO 527-2, *Plastics — Determination of tensile properties — Part 2: Test conditions for moulding and extrusion plastics*

ISO 1133, *Plastics — Determination of the melt mass-flow rate (MFR) and the melt volume-flow rate (MVR) of thermoplastics*

ISO 1183-1, *Plastics — Methods for determining the density of non-cellular plastics — Part 1: Immersion method, liquid pyknometer method and titration method*

ISO 12048, *Packaging — Complete, filled transport packages — Compression and stacking tests using a compression tester*

ISO 16101, *Packaging — Transport packaging for dangerous goods — Plastics compatibility testing*

ISO 16104, *Packaging — Transport packaging for dangerous goods — Test methods*

United Nations Recommendations on the Transport of Dangerous Goods — Model Regulations, ST/SG/AC. 10/1/Rev.13: United Nations, ISBN 92-1-139090-7

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1
recycled plastics material
material recovered from used industrial packagings that has been cleaned and prepared for processing into new packagings

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