



**Plastics pipes and fittings for gas
reticulation—Polyamide compounds**

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This Australian Standard® was prepared by Committee PL-021, PVC, ABS and Polyamide Pipe Systems. It was approved on behalf of the Council of Standards Australia on 12 October 2007.

This Standard was published on 31 December 2007.

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 - Australian Nuclear Science and Technology Organisation
 - Certification Interests (Australia)
 - CSIRO Manufacturing and Infrastructure Technology
 - Energy Networks Association
 - Engineers Australia
 - New Zealand Local Government
 - Master Plumbers, Gasfitters and Drainlayers New Zealand
 - New Zealand Water and Waste Association
 - Plastics Industry Pipe Association of Australia
 - Plastics New Zealand
 - Water Services Association of Australia
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This Standard was issued in draft form for comment as DR 05467.

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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Australian Standard[®]

**Plastics pipes and fittings for gas
reticulation—Polyamide compounds**

Originally as AS 2943—1987.
Second edition 2007.
Revised incorporating Amendment No. 1 (November 2018).

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Published by SAI Global Limited under licence from Standards Australia Limited, GPO Box 476, Sydney, NSW 2001, Australia

ISBN 0 7337 8488 7

PREFACE

This Australian Standard was prepared by the Australian members of the Joint Standards Australia/Standards New Zealand Committee PL-021, PVC, ABS and Polyamide Pipe Systems, to supersede AS 2943—1987. 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.

This Standard incorporates Amendment No. 1 (November 2018). The changes required by the Amendment are indicated in the text by a marginal bar and amendment number against the clause, note, table, figure or part thereof affected.

This Standard complements AS 2944.1, *Plastics pipes and fittings for gas reticulation, Part 1: Polyamide pipes* and AS 2944.2, *Plastics pipes and fittings for gas reticulation, Part 2: Polyamide fittings*.

The objective of this Standard is to provide minimum requirements for polyamide Compounds used for the manufacture of polyamide pipes and fittings for pressure applications.

In the preparation of this Standard, consideration has been given to international best practice.

The term ‘normative’ has been used in this Standard to define the application of the appendix to which it applies. A ‘normative’ appendix is an integral part of a Standard.

Statements expressed in mandatory terms in notes to tables are deemed to be requirements of this Standard. Notes to text are for information and guidance only.

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STANDARDS AUSTRALIA

Australian Standard**Plastics pipes and fittings for gas reticulation—Polyamide compounds****1 SCOPE**

This Standard specifies requirements for polyamide 11 (PA 11) and 12 (PA 12) compounds suitable for making polyamide pipe and fittings for gas reticulation.

NOTE: This Standard does not preclude the use of these materials for other fluid distribution applications.

2 APPLICATION

Determination of compliance with this Standard shall be in accordance with Appendix A.

3 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS

- | | |
|--------|--|
| 1199 | Sampling procedures for inspection by attributes |
| 1199.1 | Part 1: Sampling schemes indexed by acceptance quality limit (AQL) for lot-by-lot inspection |
| 1349 | Bourdon tube pressure and vacuum gauges |
| 2700 | Colour Standards for general purposes |
| 2944 | Plastics pipe and fittings for gas reticulation |
| 2944.1 | Part 1: Polyamide pipes |

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AS ISO/IEC

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| 17025 | General requirements for the competence of testing and calibration laboratories |
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AS/NZS

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| 1462 | Methods of test for plastics pipes and fittings |
| 1462.1 | Part 1: Method for determining the dimensioning of pipes and fittings |
| 1462.6 | Part 6: Method for hydrostatic pressure testing of pipes |
| 1462.26 | Part 26: Determination of weathering resistance of plastics pipes for external storage |
| 1462.28 | Part 28: Method for the assessment of the degree of pigment or carbon black dispersion in polyolefin pipes, fittings and compounds |
| 1462.29 | Part 29: Plastics piping and ducting systems—Determination of the long-term hydrostatic strength of thermoplastics materials in pipe form by extrapolation (ISO 9080:2003, MOD) |

ISO

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| 507 | Plastics—Polyamides—Determination of viscosity number |
| 1183 | Plastics—Methods for determining the density of non-cellular plastics (series) |
| 15512 | Plastics—Determination of water content |

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| 18 | Conformity assessment |
| 18.28 | Guide 28: Guidance on a third-party certification system for products |