

Australian Standard™

**Plastics pipes and fittings for irrigation  
and rural applications**

**Part 2: Polyethylene rural pipe**

This Australian Standard was prepared by Committee PL/6, Polyolefin Pipe Systems. It was approved on behalf of the Council of Standards Australia on 11 February 2000 and published on 3 April 2000.

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Australian Association of Certification Bodies

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Australian Gas Association

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STANDARDS AUSTRALIA

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**RECONFIRMATION**

**OF**

**AS 2698.2—2000**

**Plastics pipes and fittings for irrigation and rural applications  
Part 2: Polyethylene rural pipe**

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**RECONFIRMATION NOTICE**

Technical Committee PL-006 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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## NOTES

Australian Standard™

**Plastics pipes and fittings for irrigation  
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## PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee PL/6, Polyolefin Pipe Systems, to supersede the 1985 edition.

The objective of this edition is to align the performance requirements of this Standard with those of AS/NZS 4130, *Polyethylene (PE) pipes for pressure applications*.

The previous edition of AS 2698.2 had its performance requirements aligned with AS 1159, *Polyethylene pipes for pressure applications* which was withdrawn when it was superseded by AS/NZS 4130.

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## FOREWORD

The pipe specified in this Standard has a maximum working pressure of 0.6 MPa and the pipe material has a maximum hydrostatic design stress of 5.0 MPa at 20°C. The pipe is manufactured from polyethylene compounds complying with AS/NZS 4131.

The minimum wall thicknesses for the pipes specified have been calculated from the following formula which takes into account the hydrostatic design stress of the material and the working pressure and diameter of the pipes:

$$T_{\min.} = \frac{PD_{i \max.}}{2S - P}$$

$$T_{\max.} = 1.1T_{\min.} + 0.1$$

where

$T_{\max.}$  = maximum wall thickness, in millimetres

$T_{\min.}$  = minimum wall thickness, in millimetres

$D_{i \max.}$  = maximum mean inside diameter, in millimetres

$S$  = hydrostatic design stress of 5 MPa

$P$  = maximum allowable working pressure of 0.6 MPa

In the interests of serviceability of the pipe, and irrespective of the calculated minimum wall thickness, this Standard does not provide for a wall thickness of less than 1.6 mm.

## STANDARDS AUSTRALIA

## Australian Standard

## Plastics pipes and fittings for irrigation and rural applications

## Part 2: Polyethylene rural pipe

**1 SCOPE**

This Standard specifies requirements for black polyethylene pipe for use in rural applications below and above ground. It is not suitable for pipes conveying fuel gas.

NOTE: Advisory information on alternative methods for determining compliance of a 'lot' with this Standard is given in Appendix A of AS 4130.

**2 REFERENCED DOCUMENTS**

The following documents are referred to in this Standard:

## AS

2033 Installation of polyethylene pipe systems

3855 Suitability of plumbing and water distribution systems products for contact with potable water

## AS/NZS

4020 Products for use in contact with drinking water

4130 Polyethylene (PE) pipes for pressure applications

4131 Polyethylene (PE) compounds for pressure pipes and fittings

## ISO

2505 Thermoplastic pipes—Longitudinal reversion

2505-1 Part 1: Determination methods

2505-2 Part 2: Determination parameters

TR 10837 Determination of the thermal stability of polyethylene (PE) for use in gas pipes and fittings

**3 DEFINITIONS**

For the purpose of this Standard the definitions of AS/NZS 4130 apply.

**4 NOTATION**

The following symbols are used in this Standard:

$D_e$  = the nominal inside diameter, in millimetres

$D_m$  = the mean outside diameter, in millimetres

$D_i$  = the mean inside diameter, in millimetres

$T$  = the wall thickness, in millimetres