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**AS 1646—1992 Elastomeric seals for waterworks purposes** 21pp FF

Specifies performance and, where these are not appropriate, prescriptive requirements for seals, used in pipeline systems which convey aqueous liquids with temperatures of less than 50°C. The range of seal hardness is between 36 IRHD and 85 IRHD. The seals are manufactured from polychloroprene (CR), ethylene-propylene terpolymers (EPDM), polyisoprene rubber (IR), nitrile-butadiene rubber (NBR), natural rubber (NR), and styrene-butadiene rubber (SBR). Acceptance criteria are given for seals with defined imperfections. The appendices include alternative methods for the determination of the rate of compression stress relaxation and seal hardness.

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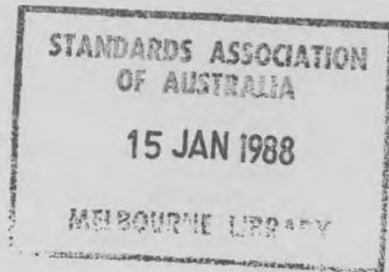


**Standards  
Association of  
Australia**



# Australian Standard<sup>®</sup> 1646—1987

## RUBBER JOINT RINGS FOR WATER SUPPLY, SEWERAGE AND DRAINAGE PURPOSES



This Australian Standard was prepared by Committee WS/10, Flexible Jointing Gaskets. It was approved on behalf of the Council of the Standards Association of Australia on 7 November 1987 and published on 1 December 1987.

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The following interests are represented on Committee WS/10:

Clay Pipe Manufacturers' Association of N.S.W.  
Confederation of Australian Industry  
Department of Public Works, N.S.W.  
Engineering and Water Supply Department, S.A.  
Gas and Fuel Corporation of Victoria  
Hunter District Water Board  
Institution of Engineers, Australia  
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Queensland Joint Committee  
Rubber rings manufacturers  
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**AUSTRALIAN STANDARD**

**RUBBER JOINT RINGS FOR  
WATER SUPPLY, SEWERAGE  
AND DRAINAGE PURPOSES**

**AS 1646—1987**

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## PREFACE

This Standard was prepared by the Association's Committee on Flexible Jointing Gaskets and supersedes AS 1646—1984. The Standard applies to rings made from vulcanized natural rubber and a selected range of synthetic rubbers intended for the jointing of pipes for water supply, sewerage and drainage purposes.

The Standard sets out compositions and physical properties for these materials, compliance with which is known to give satisfactory service in water supply, sewerage and drainage services.

It should be recognized however, that, when rings are intended for use where the likelihood of microorganism attack is high special precautions may need to be taken. This Standard covers rubber rings incorporating root growth inhibitor and these are intended only for sewerage and drainage purposes.

### **RINGS CONTAINING ROOT GROWTH INHIBITOR SHALL NOT BE USED IN WATER SUPPLY SYSTEMS.**

The root growth inhibitor selected should aim to protect rubber ring joints against the action of the roots of all plant species, to have no adverse effect upon persons handling such rings, and to avoid adverse effects on any sewage treatment process or the life of the ring itself under service conditions.

These criteria should be applied in a practical way taking account of existing test results and other information available on the characteristics of the inhibitor.

In addition to a number of minor editorial and technical changes, this Standard differs from the previous edition in the following major respects:

- (a) The quality assurance provisions of Appendices A and G have been updated.
- (b) Requirements for the measurement of ring hardness, compression set, compression stress relaxation and low temperature compression set have been upgraded.

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