AS 2937—2005
ISO 4785:1997

AS 2937—2005

Australian Standard™

Laboratory glassware—Straight-bore glass stopcocks for general purposes

This Australian Standard was prepared by Committee CH-001, Laboratory Glassware and Related Apparatus. It was approved on behalf of the Council of Standards Australia on 20 October 2005.
This Standard was published on 23 December 2005.

The following are represented on Committee CH-001:

National Association of Testing Authorities
National Measurement Laboratory
Royal Australian Chemical Institute
Royal College of Pathologists of Australasia
Science Industry Australia
University of New South Wales
University of Sydney

Keeping Standards up-to-date

Standards are living documents which reflect progress in science, technology and systems. To maintain their currency, all Standards are periodically reviewed, and new editions are published. Between editions, amendments may be issued. Standards may also be withdrawn. It is important that readers assure themselves they are using a current Standard, which should include any amendments which may have been published since the Standard was purchased.

Detailed information about Standards can be found by visiting the Standards Web Shop at www.standards.com.au and looking up the relevant Standard in the on-line catalogue.

Alternatively, the printed Catalogue provides information current at 1 January each year, and the monthly magazine, *The Global Standard*, has a full listing of revisions and amendments published each month.

Australian Standards™ and other products and services developed by Standards Australia are published and distributed under contract by SAI Global, which operates the Standards Web Shop.

We also welcome suggestions for improvement in our Standards, and especially encourage readers to notify us immediately of any apparent inaccuracies or ambiguities. Contact us via email at mail@standards.org.au, or write to the Chief Executive, Standards Australia, GPO Box 476, Sydney, NSW 2001.

This Standard was issued in draft form for comment as DR 05385.

Australian Standard™

Laboratory glassware—Straight-bore glass stopcocks for general purposes

First published as AS 2937—2005.

Published by Standards Australia, GPO Box 476, Sydney, NSW 2001, Australia

ISBN 0 7337 7067 3

PREFACE

This Standard was prepared by the Standards Australia Committee CH-001, Laboratory Glassware and Related Apparatus. This Standard is identical with, and has been reproduced from ISO 4785:1997, *Laboratory glassware—Straight-bore glass stopcocks for general purposes*.

The objective of this Standard is to ensure that the series 1 dimensions of stopcocks for general purposes are achieved.

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 appears only on the cover.

(b) In the source text 'this International Standard' should read 'this Australian Standard'.

(c) A full point should be substituted for a comma when referring to a decimal marker.

(d) Substitute 'L' for 'l' and 'mL' for 'ml' wherever it appears.

(e) Page 2, Clauses 4.1 and 4.2 *delete* 'The nominal diameters' and *replace* with 'The nominal bore diameters'.

(f) The Scope recommends that in national standards only one of the two Series of glass straight-bore stopcocks be used. This Australian Standard adopts the Series I dimensions as given in Tables 2 and 3.

The ISO Standards listed as normative references have not been adopted as Australian Standard.

The term 'informative' has been used in this Standard to define the application of the annex to which it applies. An 'informative' annex is only for information and guidance.

CONTENTS

Page

NOTES

AUSTRALIAN STANDARD

Laboratory glassware — Straight-bore glass stopcocks for general purposes

1 Scope

This International Standard specifies requirements and dimensions for two series of glass straight-bore stopcocks for general-purpose use. The stopcocks are defined by their nominal (bore) diameter and large end diameter and length of the ground zone. It is recommended that, in national standards, only one of the series should be specified.

NOTE — Annex A lists additional International Standards for other general-purpose laboratory glassware.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 719:1985, *Glass — Hydrolytic resistance of glass grains at 98 °C — Method of test and classification.*

ISO 3585:1991, *Borosilicate glass 3.3 — Properties.*

ISO 4803:1978, *Laboratory glassware — Borosilicate glass tubing.*

3 Ground zone

3.1 The taper of the ground zone shall be such as to give one increment on the diameter for ten increments on the axial length, with a tolerance of ± 0,006 on the diameter increment i.e. a taper of (1 ± 0,006)/10.

NOTES

1 This tolerance is in agreement with the relevant requirement of ISO 383. Annex B in ISO 383:1976 describes a leakage test with air which may be used to check the tightness of the ground zone.

2 Actual manufacturing techniques normally result in a tighter tolerance than that given above, but owing to the lack of experimental evidence it is not yet possible to reduce the specified value.

3.2 The centreline average height of the ground surface shall not exceed 1 µm and should preferably be less than 0,5 µm.