AS 2163—1995

Australian Standard®

Laboratory glassware—Measuring cylinders

[Based on ISO 4788:1980, Laboratory glassware; Graduated measuring cylinders]

This Australian Standard was prepared by Committee CH/1, Laboratory Glassware and Related Apparatus. It was approved on behalf of the Council of Standards Australia on 24 February 1995 and published on 5 July 1995.

The following interests are represented on Committee CH/1:

Australian Chamber of Commerce and Industry

Australian Government Analytical Laboratories

National Association of Testing Authorities, Australia

National Standard Commission

N.S.W. Agriculture

Royal Australian Chemical Institute

Royal College of Pathologists of Australasia

Scientific Suppliers Association of Australia

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PREFACE

This Standard was prepared by the Standards Australia Committee CH/1 on Laboratory Glassware and Related Apparatus to supersede the 1978 edition of AS 2163, *Graduated measuring cylinders*.

The objective of this Standard is to provide a specification for graduated measuring cylinders required for general use in laboratories.

This revision considers only those measuring cylinders considered as Class B in the 1978 edition of the Standard and the specified dimensions also conform with ISO 4788—1980, *Laboratory glassware—Graduated measuring cylinders*.

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Originated as AS R6—1947 (endorsement of BS 604—1935 with amendments).
Previous edition AS 2163— 1978.
Second edition 1995.

STANDARDS AUSTRALIA

Australian Standard

Laboratory glassware—Measuring cylinders

1 SCOPE This Standard sets out requirements for unstoppered and stoppered measuring cylinders suitable for general laboratory purposes.

2 REFERENCED DOCUMENT The following document is referred to in this Standard:

ISO
384 Laboratory glassware—Principles of design and construction of volumetric glassware

3 DEFINITION For the purpose of this Standard the definition below applies.

3.1 Capacity—the capacity corresponding to any graduation line is the volume of water at 20°C, expressed in millilitres, contained by the cylinder at 20°C when filled to that graduation line.

4 BASIS OF ADJUSTMENT

4.1 Unit of volume The unit of volume shall be the cubic centimetre (cm^3), for which the name millilitre (mL) may be used.

NOTE: The term millilitre (mL) is commonly used as a special name for cubic centimetre (cm^3), in accordance with the International System of Units (SI).

4.2 Reference temperature The standard reference temperature, i.e. the temperature at which the cylinder is intended to contain its nominal volume (nominal capacity), shall be 20°C.

5 CLASS OF ACCURACY One class of accuracy only is specified, the accuracy being lower than that associated with items of volumetric glassware intended for analytical use.

6 TYPES Cylinders shall be provided either with a pouring spout (see Figure 1), or with a ground neck (see Figure 2) and a suitably fitting stopper.

7 NOMINAL CAPACITIES AND TOLERANCES ON CAPACITIES

7.1 Nominal capacities Measuring cylinders shall have cylinders with the nominal capacities listed in Table 1.

7.2 Tolerances on capacities The tolerances on the capacities of measuring cylinders shall be as given in Table 1.

8 CONSTRUCTION

8.1 Material The cylinder should be made of clear glass, and shall be well annealed and as free as possible from striae and other visible defects. Amber or other coloured glass may be used for special purposes.