

Australian Standard™

**Reusable all-glass or metal-and-glass
syringes for medical use**

Part 1: Dimensions



This Australian Standard was prepared by Committee HE-009, Hypodermic Equipment—General Medical. It was approved on behalf of the Council of Standards Australia on 10 August 2005.
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The following are represented on Committee HE-009:

Auckland Healthcare, New Zealand
Australian Chamber of Commerce and Industry
Australian College of Operating Room Nurses
Australian Medical Association
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Federation of Sterilizing Research and Advisory Councils of Australia
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PREFACE

This Standard was prepared by the Standards Australia Committee HE-009, Hypodermic Equipment—General Medical, to supersede in part AS 1679—1974, *Glass syringes (Luer fittings) for general medical use*. 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 is identical with, and has been reproduced from ISO 595-1:1986, *Reusable all-glass or metal-and-glass syringes for medical use—Part 1: Dimensions*.

As this Standard is reproduced from an International Standard, the following applies:

- (a) Its number does not appear on each page of text and its identity is shown only on the cover and title page.
- (b) In the source text, ‘this International Standard’ should read ‘this Australian Standard’ and ‘this part of ISO 595’ should read ‘this part of AS 1679’.
- (c) A full point should be substituted for a comma when referring to a decimal marker.

Reference to International Standards should be replaced by references to the following Australian or Australian/New Zealand Standards:

<i>Reference to International Standard or other publication</i>		<i>Australian/New Zealand Standard</i>	
ISO		AS	
594	Conical fittings with a 6% (Luer) taper for syringes, needles and certain other medical equipment	1600	Medical equipment—Conical fittings with a 6% (Luer) taper for syringes, needles and certain other medical equipment
594-1	Part 1: General requirements	1600.1	Part 1: General requirements
594-2	Part 2: Lock fittings	1600.2	Part 2: Lock fittings
595	Reusable all-glass or metal-and-glass syringes for medical use	1679	Reusable all-glass or metal-and-glass syringes for medical use
595-2	Part 2: Design, performance requirements and tests	1679.2	Part 2: Design, performance requirements and tests

AUSTRALIAN STANDARD

Reusable all-glass or metal-and-glass syringes for medical use

Part 1: Dimensions

1 Scope and field of application

This part of ISO 595 specifies dimensions for reusable all-glass or metal-and-glass syringes for medical use, having a graduated capacity from 1 to 100 ml. It also specifies requirements for the graduated capacity of syringes.

ISO 595/2 specifies the design, the performance requirements and the corresponding test methods for reusable syringes.

NOTE — The term "all-glass syringe" relates to syringes with a barrel and piston made entirely of glass, with either a glass or a metal nozzle. The term "metal-and-glass syringe" relates to syringes with a glass barrel, a metal nozzle and a piston which may be either metal or partially metal.

2 References

ISO 594, *Conical fittings with a 6 % (Luer) taper for syringes, needles and certain other medical equipment* —

Part 1: General requirements.

*Part 2: Lock fittings.*¹⁾

ISO 595/2, *Reusable all-glass or metal-and-glass syringes for medical use — Part 2: Design, performance requirements and tests.*

3 Range of sizes

Syringes shall be designated by their graduated capacity in millilitres. The range of sizes of syringes shall be in accordance with table 1.

4 Capacity of syringes

4.1 Determination of capacity

The capacity corresponding to any scale interval shall be defined by the volume of water at 20 °C expelled from the syringe

when the fiducial line of the piston traverses that interval. The capacity can be conveniently determined by weighing the expelled fluid.

4.2 Tolerance on the graduated capacity and other capacities

The tolerance limits on the graduated capacity and on any capacity greater than half the graduated capacity shall be in accordance with table 1. The tolerance limits on any capacity less than half the graduated capacity shall be $\pm 5\%$ of that capacity or the smallest scale interval, whichever is the greater.

5 Dimensions

5.1 Syringes

The dimensions of all-glass and metal-and-glass syringes shall be as designated in figure 1 and as given in tables 2 and 3.

The dimensions of all-glass syringes shall be as given in table 4 and those of metal-and-glass syringes as given in table 5.

5.2 Barrel

The barrel shall be of such a length that the syringe has a usable capacity of at least 10 % greater than its nominal capacity.

5.3 Bore of nozzle

The dimensions of the bore of the nozzle shall be as given in table 4 for all-glass syringes and as given in table 5 for metal-and-glass syringes.

6 Graduated scale

6.1 Scale

The scale shall be graduated at intervals in accordance with table 1 and as illustrated in figure 2.

¹⁾ At present at the stage of draft. (Revision, in part, of ISO/R 594-1967.)