



Australian Government
**National Measurement
Institute**

Bradfield Road, West Lindfield NSW 2070

General Certificate of Approval
No 4/1/0D

Issued by the Chief Metrologist under Regulation 60
of the
National Measurement Regulations 1999

This is to certify that an approval for use for trade has been granted in respect of
Alcoholic Beverage Measures.

NOTE: This Certificate relates to the suitability of the pattern of the instrument for
use for trade only in respect of its metrological characteristics. This Certificate
does not constitute or imply any guarantee of compliance by the manufacturer or
any other person with any requirements regarding safety.

This Certificate is issued upon completion of a review of approval No 4/1/0/C.

CONDITIONS OF APPROVAL

This approval becomes subject to review on 1 July 2012, and then every
5 years thereafter.

It is the manufacturer's responsibility to ensure that all instruments purporting to
comply with this approval are constructed as described in this Certificate of
Approval and Technical Schedule. Failure to comply with this Condition may
attract penalties under Section 19B of the National Measurement Act.

The National Measurement Institute reserves the right to examine any
instrument or component of an instrument purporting to comply with this
approval.

DESCRIPTIVE ADVICE

Patterns: approved 1 July 2007

- Measures which are used to measure alcoholic beverages.

Technical Schedule No 4/1/0D describes the patterns.

FILING ADVICE

The documentation for this approval comprises:

General Certificate of Approval No 4/1/0D dated 1 July 2007
Technical Schedule No 4/1/0D dated 1 July 2007

Signed by a person authorised by the Chief Metrologist
to exercise his powers under Regulation 60 of the
National Measurement Regulations 1999.

A handwritten signature in black ink, appearing to be 'J. H. T.', located to the right of the signature text.

TECHNICAL SCHEDULE No 4/1/0D

Patterns: Alcoholic Beverage Measures

1. Description of Patterns

Measures which are used to measure alcoholic beverages, in the following categories and capacities:

- liquor (spirit) measures in capacities of 15 mL, 30 mL or 60 mL; or
- drinking measures in capacities from 100 mL to 1 L, e.g. glasses, cups, mugs; or
- portable measures in capacities from 0.5 L to 5 L, e.g. carafes, jugs.

Note: Portable containers which are prepacked and contain a marked quantity are not covered by this Approval.

1.1 Construction

1.1.1 Materials

Every measure shall be made of rigid or semi-rigid material.

Line measures shall be made of transparent or translucent material.

1.1.2 Design

Every measure shall stand firmly on its base, with the brim or the line defining its capacity in a horizontal plane.

Every measure shall empty completely when tilted to an angle of 120° from the vertical.

Every measure shall remain stable, and not overturn, when tilted to an angle of 15° from the vertical, whether it is completely filled, partly filled or empty.

Portable measures may be provided with a stopper.

1.1.3 Capacity Definition

The capacity is the volume which is marked on the measure, which is the volume of liquid the measure is deemed to contain when filled to the prescribed level with liquid at a temperature of 20°C.

The capacity of any line measure shall be defined by a denominated line. The measure shall be clearly and permanently marked with a horizontal line which is not less than 15 mm long and which is not more than 3 mm nor less than 1 mm wide. The measure may be marked with more than one volume.

The capacity of any brim measure shall be defined by the brim.

Every portable measure shall be a line measure, with the capacity line not less than 15 mm from the brim.

If a stopper is used on a portable measure, the distance between its lower extremity and the capacity line shall be not less than 10 mm.

1.2 Marking

Alcoholic beverage measures shall be marked with the following data:

Manufacturer's identification

Capacity

Batch testing mark (#)



(#) If batch testing is to be used, manufacturers should ensure that they comply with the batch testing requirements (including marking of measures) of the *Uniform Trade Measurement Legislation* and with the *Uniform Test Procedures*. If batch testing is not used, provision shall be made for a verification/certification mark to be applied on each measure.

The batch testing mark shall be in the form of a stylised scale mark. A typical example is shown above.

On liquor measures, a stylised scale mark shall be used in conjunction with a servicing licensees mark or a verification mark.

Wherever possible, markings shall be in accordance with AS ISO 1000-1998, *The international system of units (SI) and its application*. Numbers less than one shall be written with a zero in front of the decimal marker. Unit symbols are placed after the complete numerical value, leaving a space between the numerical value and the unit symbol. The unit or its symbol are written in lower case, except that an upper case L is the preferred symbol for litre in all cases, e.g. 0.5 litre (0.5 L), 500 millilitres (500 mL).

The capacity shall be clearly and permanently marked or moulded on the side or base of the measure, including the unit or its symbol.

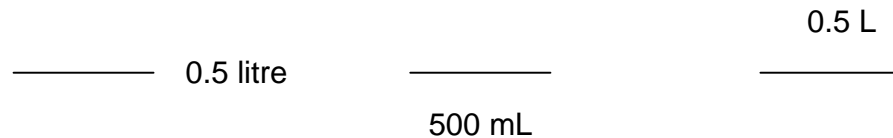
In the case of a line measure where the capacity is marked on the base, the base shall also carry a statement that the measure is a line measure.

The preferred units (and their symbols) are millilitres (mL) and litres (L). Other acceptable units are centilitres (cL) and decilitres (dL).

Where the measure is marked on the side, the capacity and its unit (or symbol) shall be in the same alignment. The markings shall be in a position clearly visible when the measure is standing on its base.

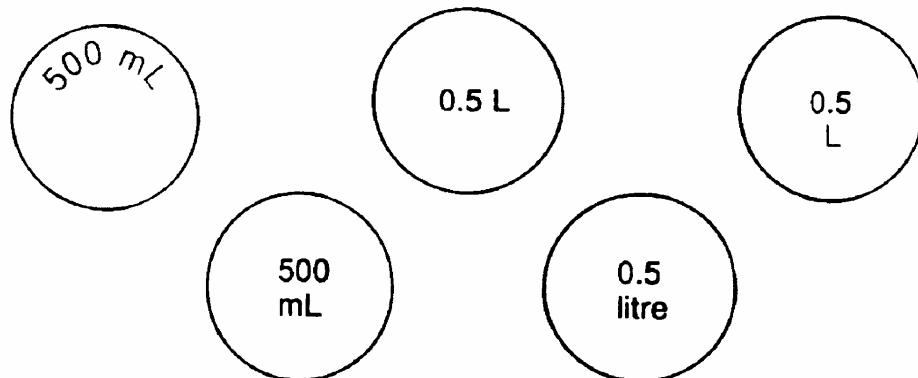
Examples: Brim measures – 0.5 litre, 500 mL, 0.5 L.

Line measures



Where the measure is marked on the base, the capacity and its unit (or symbol) shall be in the same alignment, or the unit (or its symbol) shall be below the capacity.

Examples: Brim measures



Line measures



In the statement of capacity, all numbers and uppercase letters shall be at least 5 mm high (drinking and portable measures) or 3 mm high (liquor measures); all lower case letters shall be at least 3 mm high (drinking and portable measures) or 2 mm high (liquor measures).

Any lines or decorative markings shall be positioned so that they cannot be confused with the capacity line (where applicable) or the mandatory markings.

TEST PROCEDURE

Instruments should be tested in accordance with the document NMI V 13, *Uniform Test Procedures for the Verification and Certification of Alcoholic Beverage Measures*.

Maximum Permissible Errors

Type of measure	Nominal capacity	Maximum permissible error
Brim measures	15 mL	+1 mL
	30 mL	+2 mL
	60 mL	+3.5 mL
	>60 mL	+6%
Line measures	<200 mL	±5%
	≥200 mL	±(2.5% + 5 mL)