

Australian Standard™

**Graduated straight pipettes**

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 January 2005.  
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Australian Standard™

**Graduated straight pipettes**

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## PREFACE

This Standard was prepared by the Standards Australia Committee CH-001, Laboratory Glassware and Related Apparatus to supersede AS 2167—1996, *Graduated straight pipettes*.

The objective of this Standard is to provide specifications for a range of graduated straight pipettes that are used in the laboratory.

The objective of this revision is to reconfirm the Standard with minor changes including the following:

- (a) Length is expressed by using a factor instead of a percentage to maintain consistency with other Standards published by this Committee.
- (b) Referenced documents have been updated.
- (c) The Standard has been brought into line with current editorial practices.

Pipettes with 15 seconds waiting time have been included in the range and also a Table of specified delivery times based on ISO 835, Parts 1 to 3 (1981), *Laboratory glassware—Graduated pipettes* (which were reconfirmed by ISO in 1992).

## CONTENTS

	<i>Page</i>
1 SCOPE.....	4
2 REFERENCED DOCUMENTS.....	4
3 DEFINITIONS.....	4
4 BASIS OF ADJUSTMENT .....	5
5 VOLUMETRIC ACCURACY .....	6
6 NOMINAL CAPACITIES AND LIMITS OF VOLUMETRIC ERROR.....	6
7 CONSTRUCTION.....	6
8 GRADUATION AND NUMBERING .....	7
9 DELIVERY TIME.....	9
10 COLOUR CODING.....	12
11 MARKING .....	12

STANDARDS AUSTRALIA

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**Australian Standard**

**Graduated straight pipettes**

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## 1 SCOPE

This Standard provides specifications for a series of graduated straight pipettes suitable for general laboratory purposes. The following four types of pipette are specified:

- (a) Type I-N pipettes, which are adjusted for delivery of a liquid from the zero line at the top to any graduation line, where the nominal capacity is represented by the lowest graduation line.
- (b) Type II-N pipettes, which are adjusted for delivery of a liquid from any graduation line down to the jet, where the nominal capacity is represented by the highest graduation line.
- (c) Type III-N and Type III-W pipettes, which are adjusted for delivery of a liquid from the zero line at the top to any graduation line, where the nominal capacity is obtained by delivery down to the jet.

Two classes of accuracy are specified, Class A pipettes being of higher accuracy than Class B pipettes. Type III-N pipettes are only Class B while Type III-W pipettes are only Class A.

NOTE: The method of verification and the use of pipettes are given in AS 2162.1.

## 2 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS

2162 Verification and use of volumetric apparatus

2162.1 Part 1: General—volumetric glassware

ISO

1769 Laboratory glassware—Pipettes—Colour coding

BS

1797 Schedule for tables for use in the calibration of volumetric glassware

## 3 DEFINITIONS

For the purpose of this Standard the definitions below apply.

### 3.1 Capacity

#### 3.1.1 Type I-N pipettes

The capacity corresponding to any graduation line is the volume of water at 20°C, expressed in millilitres, delivered by the pipette at 20°C, when emptied from the zero line to that graduation line, outflow being unrestricted until the final setting is made on the graduation line and no waiting time being allowed for drainage before the final reading is taken.