AS 2562—2005

Australian Standard™

Hydrometers—Portable syringe-type for lead-acid batteries

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.

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This Standard was issued in draft form for comment as DR 05086.

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Hydrometers—Portable syringe-type for lead-acid batteries

Originated as AS 2562—1982.
Second edition 2005.

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

ISBN 0 7337 7070 3

PREFACE

This Standard was prepared by the Standards Australia Committee CH-001, Laboratory Glassware and Related Apparatus to supersede AS 2562—1982, *Hydrometers—Portable syringe-type for lead-acid batteries*.

The objective of this Standard is to ensure that the requirements for battery hydrometers are achieved. It was prepared at the request of manufacturers and users of such instruments.

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

(a) Referenced documents have been upgraded.

(b) The Standard has been brought into line with current editorial practices.

The terms 'normative' and 'informative' have been used in this Standard to define the application of the appendix to which they apply. A 'normative' appendix is an integral part of a Standard, whereas an 'informative' appendix is only for information and guidance.

CONTENTS

Page

STANDARDS AUSTRALIA

Australian Standard
Hydrometers—Portable syringe-type for lead-acid batteries

S E C T I O N 1 S C O P E A N D G E N E R A L

1.1 SCOPE

This Standard specifies requirements for the design, construction and testing of portable syringe-type hydrometers for use in the determination of the density of the electrolyte in lead-acid storage batteries within the normal range of ambient temperature experienced in Australia.

NOTE: Notes on safety precautions to be observed when using hydrometers and hints for the care of hydrometers are given in Appendices A and C respectively.

1.2 APPLICATION

This Standard applies to accurate hydrometers used to evaluate batteries where high reliability and long life are essential. However, this may include emergency lighting use and marine and automotive applications.

1.3 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS	
2026	Laboratory glassware—Density hydrometers
2225	Insulating gloves for electrical purposes
2669	Sulphuric acid for use in lead-acid batteries
2700S	Colour Standards for general purposes—Swatches
AS/NZS	
1337	Eye protectors for industrial applications
2210	Occupational protective footwear (series)
2433	Plastics—Method for exposure to ultraviolet lamps
ASTM	
D543	Evaluating the resistance of plastics to chemical reagents

1.4 DEFINITIONS

For the purpose of this Standard, the definitions below apply.

1.4.1 Hydrometer float

A sealed glass or plastics float, consisting of a weighted bulb and calibrated stem, which floats vertically in a fluid to an immersion depth dependent on the density of the fluid. The calibration on the stem coincident with the immersion level indicates the density of the fluid. A typical float is shown in Figure 1.