AS 3731.2—1989
IEC 622(2)(1988)

(Identical with and reproduced from IEC 622-1988)

Australian Standard®

Stationary batteries—Nickel-cadmium

Part 2: Sealed type

[IEC title: Sealed nickel-cadmium prismatic rechargeable single cells]

[Title allocated by Defence Cataloguing Authority: BATTERY, STORAGE (Nickel-cadmium, sealed type) NSC 6140]

STANDARDS AUSTRALIA

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Australian Automobile Aftermarket Association
Australian Automobile Association
Australian Electrical and Electronic Manufacturers Association
Australian Federation of Consumer Organizations
Australian Lead Development Association
Confederation of Australian Industry
Department of Administrative Services—Australian Construction Services
Department of Defence
Electricity Supply Association of Australia
Federal Chamber of Automotive Industries
Railways of Australia Committee
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PREFACE

This Standard was prepared by the Standards Australia Committee on Secondary Batteries.

The text is identical with and has been reproduced from IEC 622(2)(1988), *Sealed nickel-cadmium prismatic rechargeable single cells.*

This Standard does not include requirements for cylindrical cells or button cells.

Statements expressed in mandatory terms in Notes to tables and figures are deemed to be requirements of this Standard.

The statement expressed in mandatory terms in the Note to Clause 4.7 is deemed to be a requirement of this Standard.

For the purposes of this Australian Standard, the IEC text should be modified as follows:

(a) The word 'prismatic' should be deleted wherever it appears.

(b) References to other publications should be replaced by references to Australian Standards as follows:

Reference to international Standard	*Australian Standard*
IEC	AS
51 Direct acting indicating analogue electrical measuring instruments and their accessories	1042 Direct-acting indicating analogue electrical measuring instruments and their accessories
417 Graphical symbols for use on equipment—Index, survey and compilation of single sheets	—
485 Digital electronic d.c. voltmeters and d.c. electronic analogue-to-digital converters	—

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SECTION ONE – GENERAL

1.1 Scope

This standard specifies tests and requirements for sealed nickel-cadmium prismatic rechargeable single cells.

Note. – In this context "prismatic" refers to cells having rectangular sides and base.

1.2 Definitions

For the purpose of this standard, the following definitions apply.

1.2.1 *Sealed cell*

A cell which remains closed and does not release either gas or liquid when operated within the limits of charge and temperature specified by the manufacturer. The cell may be equipped with a safety device to prevent dangerously high internal pressure. The cell does not require addition to the electrolyte and is designed to operate during its life in its original sealed state.

1.2.2 *Nominal voltage*

The nominal voltage of a single sealed nickel-cadmium prismatic rechargeable cell is 1.2 V.

1.2.3 *Rated capacity*

The quantity of electricity C_5 in Ah (ampere hours) declared by the manufacturer which a single cell can deliver at the 5 h discharge rate to a final voltage of 1.0 V at 20 °C after charging, storing and discharging under the conditions specified in Section Four.

1.3 Measuring instruments

The measuring instruments used for the tests shall be selected to meet the magnitude of the parameters to be measured. Equipment shall be regularly calibrated to ensure that it shall at all times have the degree of accuracy given below.

1.3.1 *Voltage measurement*

The instruments used for voltage measurement shall be voltmeters having an accuracy class of 0.5 or better as defined in IEC Publication 51 for analogue instruments and IEC Publication 485 for digital instruments.

The resistance of voltmeters shall be at least 1000 Ω/V.