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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 15142-2011

Replacing GB/T 15142-2002

**Secondary cells and batteries containing alkaline or other
non-acid electrolytes -- Vented nickel-cadmium prismatic
rechargeable single cells**

含碱性或其它非酸性电解质的蓄电池和蓄电池组 方形排气式镉镍单体蓄电池

(English Translation)

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Foreword

This standard was drafted in accordance with GB/T 1.1-2009 given rules.

This standard is identical with IEC 60623:2001 "and batteries containing alkaline square vented or other non acid electrolytes Single nickel-cadmium batteries. " this standard made the following editorial changes.

- a) "this International Standard" be replaced by "this standard";
- b) use a decimal point instead of a decimal comma " , " . " , " ;
- c) Remove the preface to international standards.

This standard replaces GB/T 15142-2002 "square opening single nickel-cadmium battery master specification." this standard compared with GB/T 15142-2002, the main changes are as follows.

- Standard IEC standard is consistent with the name (Home edition and covers);
- Model named using IEC standards (edition 2.1);
- Increased 5 °C discharge performance test (this version 4.2.2);
- Increasing the high current test (this version 4.2.4);
- Cycle life test methods vary from the requirements of 550 reduced to 500 (Excerpts 4.4.1,2002 version 4.7 and 5.9);
- Constant voltage charge acceptance test severities increase, lengthening the charge time and discharge time after the test requirements (edition 4.5, 2002 version 4.6 and 5.8);
- The air tightness test plug to the electrolyte retention test (Excerpts 4.8,2002 version 4.1 and 5.3);
- Test to identify stereotypes test (Excerpts 7.1,2002 version 6.2);
- Remove the test cycle, the test batch to batch acceptance inspection (Excerpts 7.2,2002 version 6.3);
- Remove the packaging, transportation, storage, delivery and other aspects of the requirements (Chapter 7 edition 2002).

The standard international normative documents referenced in the correspondence between the consistency of the following documents.

- GB/T 7676 (all parts) Direct acting indicating analogue electrical measuring instruments and their accessories [IEC 60051 (all parts)].

The standard proposed by the Ministry of Industry and Information Technology of the People's Republic of China.

This standard by the National Standardization Technical Committee alkaline batteries (SAC/TC77) centralized.

This standard was drafted. China Electronics Standardization Institute.

Introduction

Manufacturers and users of batteries and alkaline batteries, used to represent multiples capacity battery and battery charge and discharge of electricity flow. For example. The nominal capacity of 100Ah battery with 20A current charging current can be expressed as C/5A or 0.2CA. This current Representation for early standard alkaline batteries and battery-related in.

Many comments indicate that this method has a current dimension error that capacity (Ah) multiple of the unit is safe, not the current unit ampere. For this reason, this International Standard IEC 61434 for current formulation methods.

In short, with this way of expressing the standard test current I_t (A) as follows.

$$I_t A = C_n Ah / 1h$$

Where.

C_n --- declared by the manufacturer rated capacity, in units of Ah (Ah);

n --- declared by the manufacturer rated capacity time base in hours (h).

Containing alkaline or other non acid electrolytes and batteries Square monomer vented nickel-cadmium batteries

1.1 Scope

This standard specifies the square monomer vented nickel-cadmium battery symbol, type, dimensions, tests and requirements.

Note: This standard, the "square" refers to the side and bottom of the battery is rectangular.

If there are other standard specifies the test conditions and requirements for batteries used for special purposes, and clashed with the contents of this standard should be excellent First use of the former.

1.2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version suitable for use herein Member. For undated references, the latest edition (including any amendments) applies to this document.

GB/T 2900.41-2008 Electrotechnical terminology primary cells and batteries (IEC 60050-482:2003, IDT) IEC 60051 (all parts) Direct acting indicating analogue electrical

measuring instruments and their accessories (Directactingindicatinganalogue electricalmeasuringinstrumentsandtheiraccessories) IEC 60410 count inspection Sampling plans and procedures (Samplingplansandproceduresforinspectionbyattrib-utes) IEC 60417 (all parts), Graphical symbols for equipment [Graphicalsymbolsforuseonequipment (alparts)] IEC 60485 DC Electronic digital voltmeter and electronic DC Converters (Digitalelectronicd.c.voltmeters andd.c.electronicanalogue-to-digitalconverters) IEC 61438 basic and batteries may present a danger to health and the hazards - equipment manufacturers and users Guide (Possiblesafetyandhealthhazardsintheuseofalkalinessecondarycellsandbatteries-Guidetoe-qu ipmentmanufacturersandusers)

1.3 Terms and Definitions

GB/T 2900.41-2008 defined and the following terms and definitions apply to this document.

1.3.1

Vented battery ventedcel Cover has a channel through which the gaseous product may escape batteries.

1.3.2

Nominal voltage Monomer vented nickel-cadmium battery nominal voltage of 1.2V.

1.3.3

Rated capacity Declared by the manufacturer electricity C5Ah (ampere-hours). That single battery under the conditions specified in Chapter 4 of the charging and discharging after shelving, at 20 °C 0.2ItA standard test current discharge to the termination voltage of 1.0V can output power.