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IEC 62259:2003

## **DRAFT TANZANIA STANDARD**

**(Draft for comments only)**

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**Secondary cells and batteries containing alkaline or other non-acid electrolytes- Nickel-cadmium prismatic secondary single cells with partial gas recombination**

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**TANZANIA BUREAU OF STANDARDS**

## 1 National Foreword

This draft Tanzania Standard has been prepared by the Cells and Batteries Technical Committee, under the supervision of the Electrical Engineering Divisional Standards Committee (EEDC)

This draft Tanzania Standard is an adoption of the International Standard **IEC 62259:2003** *Secondary cells and batteries containing alkaline or other non-acid electrolytes- Nickel-cadmium prismatic secondary single cells with partial gas recombination*, which has been prepared by the International Electrotechnical Commission.

## 2 Terminology and conventions

Some terminologies and certain conventions are not identical with those used in Tanzania standards; attention is drawn especially to the following: -

- 1) The comma has been used as a decimal marker for metric dimensions. In Tanzania Standards, it is current practice to use “full point” on the baseline as the decimal marker.
- 2) Where the words “International Standard(s)” appear, referring to this standard they should read “Tanzania Standard(s)”.

## Abstract

This International Standard specifies marking, designation, dimensions, tests and requirements for vented nickel-cadmium prismatic secondary single cells where special provisions have been made in order to have partial or, under very specific conditions, full gas recombination.

## CONTENTS

	FOREWORD .....	5
	INTRODUCTION .....	9
1	Scope .....	11
2	Normative references.....	11
3	Terms and definitions .....	13
4	Parameter measurement tolerances.....	13
5	Designation and marking .....	15
5.1	Cell designation .....	15
5.2	Cell termination .....	15
5.3	Marking .....	15
5.4	Safety recommendations .....	15
6	Dimensions .....	15
7	Electrical tests .....	17
7.1	Charging procedure for test purposes .....	17
7.2	Discharge performance.....	17
7.3	Charge retention .....	21
7.4	Endurance .....	23
7.5	Charge acceptance at constant voltage .....	25
7.6	Overcharge.....	25
7.7	Vent operation .....	25
7.8	Electrolyte retention.....	27
7.9	Determination of gas recombination efficiency .....	27
7.10	Storage.....	31
8	Mechanical tests .....	31
9	Physical appearance.....	31
10	Conditions for approval and acceptance .....	31
10.1	Type approval.....	31
10.2	Batch acceptance .....	33
	Bibliography .....	35

## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**SECONDARY CELLS AND BATTERIES CONTAINING ALKALINE  
OR OTHER NON-ACID ELECTROLYTES –  
NICKEL-CADMIUM PRISMATIC SECONDARY SINGLE CELLS  
WITH PARTIAL GAS RECOMBINATION**

## FOREWORD

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International Standard IEC 62259 has been prepared by subcommittee 21A: Secondary cells and batteries containing alkaline or other non-acid electrolytes, of IEC technical committee 21: Secondary cells and batteries.

The text of this standard is based on the following documents:

FDIS	Report on voting
21A/386/FDIS	21A/392/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

The committee has decided that the contents of this publication will remain unchanged until 2008-12. At this date, the publication will be

- reconfirmed;
- withdrawn;
- replaced by a revised edition, or
- amended.

## INTRODUCTION

Traditionally the manufacturers and users of alkaline secondary cells and batteries have expressed the current used to charge and discharge these cells and batteries as a multiple of the capacity. For example, a current of 20 A used to charge a cell with a rated capacity ( $C$  Ah) of 100 Ah would be expressed as  $C/5$  A or  $0,2 C$  A. This method of current designation has been used in earlier standards relating to alkaline secondary cells and batteries.

Comments have been made, however, that this method of current designation is dimensionally incorrect in that a multiple of the capacity (ampere-hours) will be in ampere-hours and not, as required for current, in amperes. As a result of these comments, the method described in IEC 61434 has been used in this standard.

In brief, the method states the reference test current ( $I_t$ ) is expressed as

$$I_t \text{ A} = C_n \text{ Ah} / 1 \text{ h}$$

where

$C_n$  is the rated capacity declared by the manufacturer in ampere hours (Ah), and  $n$  is the time base in hours (h) for which the rated capacity is declared.

## SECONDARY CELLS AND BATTERIES CONTAINING ALKALINE OR OTHER NON-ACID ELECTROLYTES – NICKEL-CADMIUM PRISMATIC SECONDARY SINGLE CELLS WITH PARTIAL GAS RECOMBINATION

### 1 Scope

This International Standard specifies marking, designation, dimensions, tests and requirements for vented nickel-cadmium prismatic secondary single cells where special provisions have been made in order to have partial or, under very specific conditions, full gas recombination.

NOTE In this context, "prismatic" refers to cells having rectangular sides and base.

When there exists an IEC standard specifying test conditions and requirements for cells used in special applications and which is in conflict with this standard, the former shall take precedence.

### 2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60050-486, *International Electrotechnical Vocabulary (IEV) – Chapter 486: Secondary cells and batteries*

IEC 60051 (all parts), *Direct acting indicating analogue electrical measuring instruments and their accessories*

IEC 60410, *Sampling plans and procedures for inspection by attributes*

IEC 60417-DB:2002<sup>1</sup>, *Graphical symbols for use on equipment*

IEC 60485, *Digital electronic d.c. voltmeters and d.c. electronic analogue-to-digital converters*

IEC 61434, *Secondary cells and batteries containing alkaline or other non-acid electrolytes – Guide to the designation of current in alkaline secondary cell and battery standards*

IEC 61438, *Possible safety and health hazards in the use of alkaline secondary cells and batteries – Guide to equipment manufacturers and users*

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