

**SLOVENSKI STANDARD
SIST EN 61951-2:2002****01-september-2002**

**Secondary cells and batteries containing alkaline or other non-acid electrolytes -
Portable sealed rechargeable single cells - Part 2: Nickel-metal hydride**Secondary cells and batteries containing alkaline or other non-acid electrolytes - Portable
sealed rechargeable single cells -- Part 2: Nickel-metal hydrideSekundärzellen und Batterien mit alkalischem oder anderen nichtsäurehaltigen
Elektrolyten - Tragbare wiederaufladbare gasdichte Einzelzellen - Teil 2: Nickel-
Metallhydrid**(standards.iteh.ai)**Accumulateurs alcalins et autres accumulateurs à électrolyte non acide - Accumulateurs
individuels portables étanches -- Partie 2: Nickel-métal hydrure

<https://standards.iteh.ai/catalog/standards/sist/62f47c9-ac4d-4021-8775-1484d224a95e/sist-en-61951-2-2002>

Ta slovenski standard je istoveten z: EN 61951-2:2001**ICS:**29.220.30 Alkaline secondary cells and
batteries**SIST EN 61951-2:2002****en**

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EUROPEAN STANDARD

EN 61951-2

NORME EUROPÉENNE

EUROPÄISCHE NORM

May 2001

ICS 29.220.30

English version

**Secondary cells and batteries containing alkaline
or other non-acid electrolytes -
Portable sealed rechargeable single cells
Part 2: Nickel-metal hydride
(IEC 61951-2:2001)**

Accumulateurs alcalins et autres
accumulateurs à électrolyte non acide -
Accumulateurs individuels portables
étanches
Partie 2: Nickel-métal hydrure
(CEI 61951-2:2001)

Sekundärzellen und Batterien mit
alkalischem oder anderen
nichtsäurehaltigen Elektrolyten -
Tragbare wiederaufladbare
gasdichte Einzelzellen
Teil 2: Nickel-Metallhydrid
(IEC 61951-2:2001)

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This European Standard was approved by CENELEC on 2001-03-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Foreword

The text of document 21A/293/FDIS, future edition 1 of IEC 61951-2, prepared by SC 21A, Secondary cells and batteries containing alkaline or other non-acid electrolytes, of IEC TC 21, Secondary cells and batteries, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61951-2 on 2001-03-01.

The following dates were fixed:

- latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2001-12-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2004-03-01

Annexes designated "normative" are part of the body of the standard.

Annexes designated "informative" are given for information only.

In this standard, annex ZA is normative.

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 61951-2:2001 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 60068-2-29 NOTE: Harmonized as EN 60068-2-29:1993 (not modified).

IEC 61434 NOTE: Harmonized as EN 61434:1996 (not modified).

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60051	Series	Direct acting indicating analogue electrical measuring instruments and their accessories	EN 60051	Series
IEC 60410	1)	Sampling plans and procedures for inspection by attributes	-	-
IEC 60485	1)	Digital electronic d.c. voltmeters and d.c. electronic analogue-to-digital converters	-	-

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1) undated reference.

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NORME
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61951-2

Première édition
First edition
2001-01

Accumulateurs alcalins et autres accumulateurs
à électrolyte non acide –
Accumulateurs individuels portables étanches –

Partie 2:
Nickel-métal hydrure

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Secondary cells and batteries containing alkaline
or other non-acid electrolytes –
Portable sealed rechargeable single cells –

Part 2:
Nickel-metal hydride

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International Electrotechnical Commission
Международная Электротехническая Комиссия

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CONTENTS

	Page
FOREWORD.....	7
INTRODUCTION.....	9
Clause	
1 General.....	11
1.1 Scope.....	11
1.2 Normative references.....	11
1.3 Definitions.....	11
1.4 Parameter measurement tolerances.....	13
2 Designation and marking.....	15
2.1 Cell designation.....	15
2.1.1 Small prismatic cells.....	15
2.1.2 Cylindrical cells.....	15
2.1.3 Button cells.....	15
2.2 Cell termination.....	15
2.3 Marking.....	17
2.3.1 Small prismatic cells and cylindrical cells.....	17
2.3.2 Button cells.....	17
3 Dimensions.....	19
3.1 Small prismatic cells and cylindrical cells.....	19
3.2 Button cells.....	21
4 Electrical tests.....	23
4.1 Charging procedure for test purposes.....	23
4.2 Discharge performance.....	23
4.2.1 Discharge performance at 20 °C.....	23
4.2.2 Discharge performance at 0 °C.....	25
4.3 Charge (capacity) retention.....	27
4.4 Endurance in cycles.....	27
4.5 Charge acceptance at constant voltage.....	27
4.6 Overcharge.....	29
4.7 Safety device operation.....	29
4.8 Storage.....	29
4.9 Internal resistance.....	31
4.9.1 Measurement of the internal a.c. resistance.....	31
4.9.2 Measurement of the internal d.c. resistance.....	31
5 Mechanical tests.....	33
6 Conditions for approval and acceptance.....	33
6.1 Type approval.....	33
6.2 Batch acceptance.....	35
Bibliography.....	37

	Page
Figure 1 – Jacketed cylindrical cells.....	19
Figure 2 – Jacketed small prismatic cells.....	19
Figure 3 – Button cells.....	21
Table 1 – Dimensions of jacketed small prismatic cells.....	19
Table 2 – Dimensions of jacketed cylindrical cells.....	21
Table 3 – Dimensions of button cells.....	21
Table 4 – Discharge performance at 20 °C for small prismatic cells and cylindrical cells.....	23
Table 5 – Discharge performance at 20 °C for button cells.....	25
Table 6 – Discharge performance at 0 °C for small prismatic cells and cylindrical cells.....	25
Table 7 – Discharge performance at 0 °C for button cells.....	25
Table 8 – Endurance in cycles.....	27
Table 9 – Sequence of tests for type approval.....	33
Table 10 – Recommended test sequence for batch acceptance.....	35

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<https://standards.iteh.ai/catalog/standards/sist/82f4a7c6-ae6a-4021-8775-1484d224a95e/sist-en-61951-2-2002>

INTERNATIONAL ELECTROTECHNICAL COMMISSION

**SECONDARY CELLS AND BATTERIES CONTAINING ALKALINE
OR OTHER NON-ACID ELECTROLYTES –
PORTABLE SEALED RECHARGEABLE SINGLE CELLS –**

Part 2: Nickel-metal hydride

FOREWORD

- 1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, the IEC publishes International Standards. Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. The IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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- 6) Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. The IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 61951-2 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/293/FDIS	21A/305/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 3.

The committee has decided that the contents of this publication will remain unchanged until 2006-07. At this date, the publication will be

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

INTRODUCTION

1 This International Standard is an amalgamation of all currently valid standards for portable sealed nickel-metal hydride secondary single cells: IEC 61436, 1998 and IEC 61808, 1999. It complies with the objective to reduce the number of valid standards, and does not introduce technical modifications in the original standards. If, in the future, this standard is amended, the relevant original standards will be cancelled.

2 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 (or discharge) 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, 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 that 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.

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