
**Secondary cells and batteries containing alkaline or other non-acid electrolytes -
Safety requirements for portable sealed alkaline secondary cells and batteries**

Secondary cells and batteries containing alkaline or other non-acid electrolytes - Safety requirements for portable sealed alkaline secondary cells and batteries

Sekundärzellen und Batterien mit alkalischem oder anderen nichtsäurehaltigen Elektrolyten - Sicherheitsanforderungen für tragbare gasdichte alkalische Sekundärzellen und Batterien

Accumulateurs alcalins ou autres accumulateurs à électrolyte non acide - Exigences de sécurité pour les accumulateurs alcalins portables étanches

Ta slovenski standard je istoveten z: EN 61809:2000

ICS:

29.220.30 Alkaline secondary cells and batteries

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EUROPEAN STANDARD

EN 61809

NORME EUROPÉENNE

EUROPÄISCHE NORM

November 2000

ICS 29.220.30

English version

**Secondary cells and batteries containing alkaline
or other non-acid electrolytes -
Safety requirements for portable sealed alkaline
secondary cells and batteries
(IEC 61809:2000)**

Accumulateurs alcalins ou autres
accumulateurs à électrolyte non acide -
Exigences de sécurité pour les
accumulateurs alcalins portables
étanches
(CEI 61809:2000)

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alkalischem oder anderen
nichtsäurehaltigen Elektrolyten -
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gasdichte alkalische Sekundärzellen
und Batterien
(IEC 61809:2000)

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This European Standard was approved by CENELEC on 2000-09-01. 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/277/FDIS, future edition 1 of IEC 61809, 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 61809 on 2000-09-01.

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) 2001-06-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2003-09-01

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 and annexes A and B are informative.
Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 61809:2000 was approved by CENELEC as a European Standard without any modification.

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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 60285	— ¹⁾	Alkaline secondary cells and batteries - Sealed nickel-cadmium cylindrical rechargeable single cells	EN 60285	1994 ²⁾
IEC 60664 (mod)	Series	Insulation coordination for equipment within low-voltage systems	HD 625	Series
IEC 61436	— ¹⁾	Secondary cells and batteries containing alkaline or other non-acid electrolytes - Sealed nickel-metal hydride rechargeable single cells	EN 61436	1998 ²⁾
IEC 61438	— ¹⁾	Possible safety and health hazards in the use of alkaline secondary cells and batteries - Guide to equipment manufacturers and users	-	-
IEC 61440	— ¹⁾	Secondary cells and batteries containing alkaline or other non-acid electrolytes - Sealed nickel-cadmium small prismatic rechargeable single cells	EN 61440	1997 ²⁾

¹⁾ Undated reference.

²⁾ Valid edition at date of issue.

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**SECONDARY CELLS AND BATTERIES CONTAINING ALKALINE
OR OTHER NON-ACID ELECTROLYTES –
SAFETY REQUIREMENTS FOR PORTABLE SEALED ALKALINE
SECONDARY CELLS AND BATTERIES**

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.
- 2) The formal decisions or agreements of the IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested National Committees.
- 3) The documents produced have the form of recommendations for international use and are published in the form of standards, technical specifications, technical reports or guides and they are accepted by the National Committees in that sense.
- 4) In order to promote international unification, IEC National Committees undertake to apply IEC International Standards transparently to the maximum extent possible in their national and regional standards. Any divergence between the IEC Standard and the corresponding national or regional standard shall be clearly indicated in the latter.
- 5) The IEC provides no marking procedure to indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with one of its standards.
- 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 61809 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/277/FDIS	21A/282/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.

Annexes A and B are for information only.

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

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

SECONDARY CELLS AND BATTERIES CONTAINING ALKALINE OR OTHER NON-ACID ELECTROLYTES – SAFETY REQUIREMENTS FOR PORTABLE SEALED ALKALINE SECONDARY CELLS AND BATTERIES

1 General

1.1 Scope

This International Standard specifies tests and requirements for portable sealed alkaline secondary cells and batteries (other than button) for their safe operation under intended use and reasonably foreseeable misuse.

1.2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this International Standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of IEC and ISO maintain registers of currently valid International Standards.

IEC 60285:—, *Alkaline secondary cells and batteries – Sealed nickel-cadmium cylindrical rechargeable single cells*

IEC 60664 (all parts), *Insulation coordination for equipment within low-voltage systems*

IEC 61436:—, *Secondary cells and batteries containing alkaline or other non-acid electrolytes – Sealed nickel-metal hydride rechargeable single cells*

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

IEC 61440:—, *Secondary cells and batteries containing alkaline or other non-acid electrolytes – Sealed nickel-cadmium small prismatic rechargeable single cells*

1.3 Definitions

For the purpose of this International Standard, the following definitions apply.

1.3.1

safety

freedom from unacceptable risk

1.3.2

risk

a combination of the probability of occurrence of harm and the severity of that harm

1.3.3

harm

physical injury or damage to the health of people either directly or indirectly as a result of damage to property or to the environment