



NSAI
Standards

Irish Standard
I.S. EN 61951-1:2017

Secondary cells and batteries containing alkaline or other non-acid electrolytes -
Secondary sealed cells and batteries for portable applications - Part 1: Nickel-cadmium

I.S. EN 61951-1:2017

Incorporating amendments/corrigenda/National Annexes issued since publication:

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National Foreword

I.S. EN 61951-1:2017 is the adopted Irish version of the European Document EN 61951-1:2017, Secondary cells and batteries containing alkaline or other non-acid electrolytes - Secondary sealed cells and batteries for portable applications - Part 1: Nickel-cadmium

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EUROPEAN STANDARD

EN 61951-1

NORME EUROPÉENNE

EUROPÄISCHE NORM

May 2017

ICS 29.220.30

Supersedes EN 61951-1:2014

English Version

**Secondary cells and batteries containing alkaline or other non-acid electrolytes - Secondary sealed cells and batteries for portable applications - Part 1: Nickel-cadmium
(IEC 61951-1:2017)**

Accumulateurs alcalins et autres accumulateurs à électrolyte non acide - Accumulateurs étanches pour applications portables - Partie 1: Nickel-cadmium
(IEC 61951-1:2017)

Akkumulatoren und Batterien mit alkalischen oder anderen nichtsäurehaltigen Elektrolyten - Tragbare wiederaufladbare gasdichte Einzelzellen - Teil 1: Nickel-Cadmium
(IEC 61951-1:2017)

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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

EN 61951-1:2017

European foreword

The text of document 21A/622/FDIS, future edition 4 of IEC 61951-1, 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 approved by CENELEC as EN 61951-1:2017.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2018-01-11
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2020-04-11

This document supersedes EN 61951-1:2014.

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

IEC 60051 Series	NOTE	Harmonized as EN 60051 Series.
IEC 60086 Series	NOTE	Harmonized as EN 60086 Series.
IEC 61434	NOTE	Harmonized as EN 61434.

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

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

NOTE 1 When an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60050-482	2004	International Electrotechnical Vocabulary (IEV) - Part 482: Primary and secondary cells and batteries	-	-
IEC 60086-1	-	Primary batteries - Part 1: General	EN 60086-1	-
IEC 60086-2	-	Primary batteries - Part 2: Physical and electrical specifications	EN 60086-2	-
IEC 61959	-	Secondary cells and batteries containing alkaline or other non-acid electrolytes - Mechanical tests for sealed portable secondary cells and batteries	EN 61959	-
IEC 62133-1	-	Secondary cells and batteries containing alkaline or other non-acid electrolytes - Safety requirements for portable sealed secondary cells, and for batteries made from them, for use in portable applications - Part 1: Nickel systems	EN 62133-1	-

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Edition 4.0 2017-03

INTERNATIONAL STANDARD

NORME INTERNATIONALE

Secondary cells and batteries containing alkaline or other non-acid electrolytes – Secondary sealed cells and batteries for portable applications – Part 1: Nickel-cadmium

Accumulateurs alcalins et autres accumulateurs à électrolyte non acide – Accumulateurs étanches pour applications portables – Partie 1: Nickel-cadmium





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IEC 61951-1

Edition 4.0 2017-03

INTERNATIONAL STANDARD

NORME INTERNATIONALE

Secondary cells and batteries containing alkaline or other non-acid electrolytes – Secondary sealed cells and batteries for portable applications – Part 1: Nickel-cadmium

Accumulateurs alcalins et autres accumulateurs à électrolyte non acide – Accumulateurs étanches pour applications portables – Partie 1: Nickel-cadmium

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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

Part 1: Nickel-cadmium

FOREWORD

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International Standard IEC 61951-1 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.

This fourth edition cancels and replaces the third edition published in 2013 of which it constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- addition of battery type;
- revision of Figure 3 (6.1.3.1);

- addition of “Optional pip” note to positive contact;
- changed leader line position from pip to flats of positive contact (B and G).

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

FDIS	Report on voting
21A/622/FDIS	21A/630/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.

A list of all parts of the IEC 61951 series can be found, under the general title *Secondary cells and batteries containing alkaline or other non-acid electrolytes – Secondary sealed cells and batteries for portable applications*, on the IEC website.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC website under "<http://webstore.iec.ch>" in the data related to the specific publication. 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 – SECONDARY SEALED CELLS AND BATTERIES FOR PORTABLE APPLICATIONS –

Part 1: Nickel-cadmium

1 Scope

This part of IEC 61951 specifies marking, designation, dimensions, tests and requirements for secondary sealed nickel-cadmium small prismatic, cylindrical and button cells and batteries, suitable for use in any orientation, for portable applications.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 60050-482:2004, *International Electrotechnical Vocabulary (IEV) – Part 482: Primary and secondary cells and batteries*

IEC 60086-1, *Primary batteries – Part 1: General*

IEC 60086-2, *Primary batteries – Part 2: Physical and electrical specifications*

IEC 61959, *Secondary cells and batteries containing alkaline or other non-acid electrolytes – Mechanical tests for sealed portable secondary cells and batteries*

IEC 62133-1, *Secondary cells and batteries containing alkaline or other non-acid electrolytes – Safety requirements for portable sealed secondary cells and for batteries made from them, for use in portable applications – Part 1: Nickel systems*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 60050-482 and the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

3.1

nominal voltage

suitable approximate value of voltage used to designate or identify a cell or a battery

Note 1 to entry: The nominal voltage of a sealed nickel-cadmium rechargeable single cell: 1,2 V.

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