Secondary cells and batteries containing alkaline or other non-acid electrolytes - Secondary lithium, nickel cadmium and nickel-metal hydride cells and batteries for portable applications - Guidance on environmental aspects



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NATIONAL FOREWORD

See Eesti standard EVS-EN IEC 63218:2021 sisaldab Euroopa standardi EN IEC 63218:2021 ingliskeelset teksti.

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Date of Availability of the European standard is 08.10.2021.

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EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN IEC 63218

October 2021

ICS 29.220.30

English Version

Secondary cells and batteries containing alkaline or other nonacid electrolytes - Secondary lithium, nickel cadmium and nickelmetal hydride cells and batteries for portable applications -Guidance on environmental aspects (IEC 63218:2021)

Accumulateurs alcalins et autres accumulateurs à électrolyte non acide - Accumulateurs et batteries d'accumulateurs lithium, nickel-cadmium et nickel-métal hydrure pour applications portables - Recommandations relatives aux aspects environnementaux (IEC 63218:2021)

Sekundärzellen und -batterien mit alkalischen oder anderen nicht-säurehaltigen Elektrolyten - Lithium-, Nickel-Cadmium- und Nickel-Metallhydrid-Sekundärzellen und batterien für tragbare Anwendungen - Leitfaden zu Umweltaspekten (IEC 63218:2021)

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

European foreword

The text of document 21A/763/FDIS, future edition 1 of IEC 63218, 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 IEC 63218:2021.

The following dates are fixed:

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IEC 60086-6:2020 NOTE Harmonized as EN IEC 60086-6:2020 (not modified)

IEC 62281:2019 NOTE Harmonized as EN IEC 62281:2019 (not modified)

IEC 62321:2008 NOTE Harmonized as EN 62321:2009 (not modified)

IEC 62321-5:2013 NOTE Harmonized as EN 62321-5:2014 (not modified)

IEC 62430:2019 NOTE Harmonized as EN IEC 62430:2019 (not modified)

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

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.

NOTE 1 Where 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>	EN/HD	<u>Year</u>
IEC 62133-2	2017	Secondary cells and batteries containingEN 62133-2 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 2: Lithium systems		2017
+ AMD1	2021	Q,	+ A1	2021
IEC 62902	-	Secondary cells and batteries - Mark symbols for identification of their chemist		-
ISO 7000	-	Graphical symbols for use on equipmer Registered symbols	ıt	-
ISO 14021	2016	Environmental labels and declarations Self-declared environmental claims (Ty Il environmental labelling)		2016
ISO 14040	2006	Environmental management - Life cy assessment - Principles and framework	cleEN ISO 14040	2006



Edition 1.0 2021-08

INTERNATIONAL STANDARD

NORME INTERNATIONALE



Secondary cells and batteries containing alkaline or other non-acid electrolytes – Secondary lithium, nickel cadmium and nickel-metal hydride cells and batteries for portable applications – Guidance on environmental aspects

Accumulateurs alcalins et autres accumulateurs à électrolyte non acide – Accumulateurs et batteries d'accumulateurs lithium, nickel-cadmium et nickel-métal hydrure pour applications portables – Recommandations relatives aux aspects environnementaux





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Edition 1.0 2021-08

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NORME INTERNATIONALE



Secondary cells and batteries containing alkaline or other non-acid electrolytes – Secondary lithium, nickel cadmium and nickel-metal hydride cells and batteries for portable applications – Guidance on environmental aspects

Accumulateurs alcalins et autres accumulateurs à électrolyte non acide – Accumulateurs et batteries d'accumulateurs lithium, nickel-cadmium et nickel-métal hydrure pour applications portables – Recommandations relatives aux aspects environnementaux

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ELECTROTECHNICAL
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INTERNATIONAL ELECTROTECHNICAL COMMISSION

SECONDARY CELLS AND BATTERIES CONTAINING ALKALINE OR OTHER NON-ACID ELECTROLYTES – SECONDARY LITHIUM, NICKEL CADMIUM AND NICKEL-METAL HYDRIDE CELLS AND BATTERIES FOR PORTABLE APPLICATIONS – GUIDANCE ON ENVIRONMENTAL ASPECTS

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The text of this International Standard is based on the following documents:

FDIS	Report on voting	
21A/763/FDIS	21A/768/RVD	

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

The language used for the development of this International Standard is English.

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INTRODUCTION

Secondary batteries, such as secondary lithium, nickel cadmium (Ni-Cd) and nickel-metal hydride cells and batteries, consume a large amount of non-renewable resources like copper, manganese, lithium, and nickel. In addition to that, Ni-Cd cells and batteries include hazardous material like cadmium as a negative electrode. Nevertheless, there is no international environmental standard for secondary batteries.

The primary purpose of this document is to contribute to improving environmental sustainability by providing:

- a) basic consideration and information relating to the environmental aspects and environmental impact of secondary cells and batteries;
- b) basic guidance for the collection and recycling of secondary cells and batteries;
- c) basic guidance for environmental impact assessment across all life cycle stages for the designing and manufacturing of secondary cells and batteries;
- d) useful information for interested parties regarding regulations on secondary cells and batteries.

Additionally various countries and regions have their own environmental regulations for secondary cells and batteries. These differing regulations could lead to trade barriers in the future. Therefore, the secondary purpose of this document is to avoid potential trade barrier issues by providing countries and regions that lack secondary battery collection and recycling regulations with guidance with which they can establish harmonized standardization with the international standard.

This document is not intended to be applied for the certification of specific products.

This document provides guidance and recommendations for the collection, recycling, environmental impact assessment, including design, manufacturing, transportation, storage and disposal of secondary cells and batteries.

Collection and recycling are activities that are conducted across national borders. Therefore, international standards are necessary in addition to transport regulations.

The expected users of this document are:

- 1) cell and battery manufacturers, end-product manufacturers, recycling organizations, transport organizations and distributors;
- 2) national, regional, and local authorities that establish the regulation of the collection and recycling, environmental impact assessment, including design, manufacturing, transportation, storage and disposal of secondary cells and batteries;
- 3) national, regional, and local authorities that revise the regulation of the collection and recycling, environmental impact assessment, including design, manufacturing, transportation, storage and disposal of secondary cells and batteries.

However, this document does not preclude other stakeholders from using this document.

National and regional standards, regulations and voluntary stewardship programmes are given priority in the matters covered in this document.