



NSAI
Standards

Irish Standard
I.S. EN IEC 60086-6:2020

Primary batteries - Part 6: Guidance on environmental aspects

I.S. EN IEC 60086-6:2020

Incorporating amendments/corrigenda/National Annexes issued since publication:

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National Foreword

I.S. EN IEC 60086-6:2020 is the adopted Irish version of the European Document EN IEC 60086-6:2020, Primary batteries - Part 6: Guidance on environmental aspects

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EUROPEAN STANDARD

EN IEC 60086-6

NORME EUROPÉENNE

EUROPÄISCHE NORM

April 2020

ICS 29.220.10

English Version

**Primary batteries - Part 6: Guidance on environmental aspects
(IEC 60086-6:2020)**

Piles électriques - Partie 6: Recommandation sur les
aspects liés à l'environnement
(IEC 60086-6:2020)

Primärbatterien - Teil 6: Leitfaden zu Umweltaspekten
(IEC 60086-6:2020)

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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

EN IEC 60086-6:2020 (E)

European foreword

The text of document 35/1436/FDIS, future edition 1 of IEC 60086-6, prepared by IEC/TC 35 "Primary cells and batteries" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 60086-6:2020.

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) 2020-12-13
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2023-03-13

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

ISO 14040:2006	NOTE	Harmonized as EN ISO 14040:2006 (not modified)
IEC 62321 (series)	NOTE	Harmonized as EN 62321 (series)
IEC 62321-4:2013	NOTE	Harmonized as EN 62321-4:2014 (not modified)
IEC 62321-5:2013	NOTE	Harmonized as EN 62321-5:2014 (not modified)

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

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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>	<u>EN/HD</u>	<u>Year</u>
IEC 60086-1	2015	Primary batteries - Part 1: General	EN 60086-1	2015
ASTM D 93-79 or D 93-80	-	Standard Test Methods for Flash Point by Pensky-Martens Closed Cup Tester	-	-
ASTM D 3278-78	-	Standard Test Methods for Flash Point of Liquids by Small Scale Closed-Cup Apparatus	-	-
EPA Publication SW-846, Method 1110A	-	Test Methods for Evaluating Solid Waste, Physical/Chemical Methods	-	-
EPA Publication SW-846, Method 1311	-	Test Methods for Evaluating Solid Waste, Physical/Chemical Methods	-	-
EPA Publication SW-846, Method 9040C	-	Test Methods for Evaluating Solid Waste, Physical/Chemical Methods	-	-

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IEC 60086-6

Edition 1.0 2020-02

INTERNATIONAL STANDARD

NORME INTERNATIONALE



**Primary batteries –
Part 6: Guidance on environmental aspects**

**Piles électriques –
Partie 6: Recommandation sur les aspects liés à l'environnement**





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IEC 60086-6

Edition 1.0 2020-02

INTERNATIONAL STANDARD

NORME INTERNATIONALE



**Primary batteries –
Part 6: Guidance on environmental aspects**

**Piles électriques –
Partie 6: Recommandation sur les aspects liés à l'environnement**

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

PRIMARY BATTERIES –

Part 6: Guidance on environmental aspects

FOREWORD

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International Standard IEC 60086-6 has been prepared by IEC technical committee 35: Primary cells and batteries.

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

FDIS	Report on voting
35/1436/FDIS	35/1440/RVD

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

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

A list of all parts in the IEC 60086 series, published under the general title *Primary batteries*, can be found on the IEC website.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under "<http://webstore.iec.ch>" in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn,
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INTRODUCTION

Every product has some effect on the environment during its manufacture, distribution, use, and disposal. These effects can range from slight to significant; they can be short-term or long-term; and they can occur at the global, regional, or local level. Provisions in battery standards can significantly influence the extent of these environmental effects.

Environmental stewardship in the battery industry embraces a multiplicity of activities, from design, manufacturing, transportation, storage, and recycling, to disposal of the batteries.

There are often questions on the applicability of regulations to batteries. This document provides guidance on regulations applicable and not applicable to batteries, as well as procedures for measuring environmental characteristics.

PRIMARY BATTERIES –

Part 6: Guidance on environmental aspects

1 Scope

This part of IEC 60086 applies to all chemistries of portable primary cells and batteries standardized in the 60086 series.

The purpose of this document is to provide guidance on the proper scientific protocols for testing the environmental performance of batteries; the symbols used to convey messages for collection, recycling, or other ideas; and the aspects and functional unit(s) to be included in assessing the environmental impact of batteries with modern life-cycle analysis techniques.

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 60086-1:2015, *Primary batteries-Part 1: General*

ASTM Standard D 93-79 or D 93-80, *Standard Test Methods for Flash Point by Pensky-Martens Closed Cup Tester*

ASTM Standard D 3278-78, *Standard Test Methods for Flash Point of Liquids by Small Scale Closed-Cup Apparatus*

United States EPA Publication SW-846, Method 1110A “*Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*”

United States EPA Publication SW-846, Method 1311 “*Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*”

United States EPA Publication SW-846, Method 9040C “*Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*”

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

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

- IEC Electropedia: available at <http://www.electropedia.org/>
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3.1

cadmium free

battery that contains less than 20 parts per million cadmium per the weight of the entire battery

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