



NSAI
Standards

Irish Standard
I.S. EN 50272-1:2010

Safety requirements for secondary batteries and battery installations -- Part 1: General safety information

I.S. EN 50272-1:2010

Incorporating amendments/corrigenda issued since publication:

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NSAI 1 Swift Square, Northwood, Santry Dublin 9	T +353 1 807 3800 F +353 1 807 3838 E standards@nsai.ie W NSAI.ie	Sales: T +353 1 857 6730 F +353 1 857 6729 W standards.ie
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EUROPEAN STANDARD
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EN 50272-1

October 2010

ICS 13.260; 29.130.20

English version

**Safety requirements for secondary batteries and battery installations -
Part 1: General safety information**

Règles de sécurité pour les batteries et
les installations de batteries -
Partie 1: Information générale de sécurité

Sicherheitsanforderungen an Batterien
und Batterieanlagen -
Teil 1: Allgemeine
Sicherheitsinformationen

This European Standard was approved by CENELEC on 2010-10-01. 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, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

CENELEC

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

Management Centre: Avenue Marnix 17, B - 1000 Brussels

Foreword

This European Standard was prepared by the Technical Committee CENELEC TC 21X, Secondary cells and batteries. It was submitted to the formal vote and was approved by CENELEC as EN 50272-1 on 2010-10-01.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN and CENELEC shall not be held responsible for identifying any or all such patent rights.

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) 2011-10-01
 - latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2013-10-01
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1 Scope

This European Standard is Part 1 of EN 50272 under the generic title “*Safety requirements for secondary batteries and battery installations*” with nominal voltages up to DC 1 500 V (low voltage directive) and specifies the basic requirements referred to in the other parts of the standard as follows:

- Part 2 Stationary batteries
- Part 3 Traction batteries
- Part 4 Batteries for use in portable appliances

The requirements regarding safety, reliability, life expectancy, mechanical strength, cycle stability, internal resistance, and battery temperature, are determined by various applications, and this, in turn, determines the selection of the battery design and technology.

In general, the requirements and definitions are specified for lead-acid and nickel-cadmium batteries. For other battery systems, the requirements may be applied accordingly.

The standard covers safety aspects taking into account hazards associated with:

- electricity (installation, charging, discharging, etc.);
- electrolyte;
- inflammable gas mixtures;
- storage and transportation.

With respect to electrical safety, reference is made to EN 60364-4-41.

2 Normative references

The following referenced documents are indispensable for the application 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.

EN 50272-2	Safety requirements for secondary batteries and battery installations - Part 2: Stationary batteries
EN 50272-3	Safety requirements for secondary batteries and battery installations - Part 3: Traction batteries
EN 50272-4	Safety requirements for secondary batteries and battery installations - Part 4: Batteries for use in portable appliances
EN 60364-4-41	Electrical installations of buildings - Part 4: Protection for safety - Chapter 41: Protection against electric shock (IEC 60364-4-41)
EN 61429:1996 + A11:1998	Marking of secondary cells and batteries with the international recycling symbol ISO 7000-1135 and indications regarding directives 93/86/EEC and 91/157/EEC (IEC 61429:1995)
EN 62281	Safety of primary and secondary lithium cells and batteries during transport (IEC 62281)
IEC 60050-482	International Electrotechnical Vocabulary - Chapter 482: Primary and secondary cells and batteries
IEC 60993 series	Electrolyte for vented nickel-cadmium cells

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