

SVENSK STANDARD

SS-EN IEC 62877-1, utg 2:2024

2024-05-22

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REDLINE VERSION

Elektrolyt och vatten för ventilerade blybatterier – Del 1: Fordringar på elektrolyt

Electrolyte and water for vented lead acid accumulators – Part 1: Requirements for electrolyte

En så kallad "Redline version" (RLV) innehåller både standarden som fastställts som SS och en ändringsmarkerad IEC-standard. Alla tillägg och borttagningar sedan den tidigare utgåvan av IEC-standarden är markerade med färg. Med en RLV sparar du mycket tid när du ska identifiera och bedöma aktuella ändringar i standarden. SEK Svensk Elstandard kan bara ge ut RLV i de fall den finns tillgänglig från IEC.





Edition 2.0 2023-09 REDLINE VERSION

INTERNATIONAL STANDARD



Electrolyte and water for vented lead acid accumulators – Part 1: Requirements for electrolyte

INTERNATIONAL ELECTROTECHNICAL COMMISSION

ICS 29.220.20 ISBN 978-2-8322-7550-4

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

ELECTROLYTE AND WATER FOR VENTED LEAD ACID ACCUMULATORS –

Part 1: Requirements for electrolyte

FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of 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, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). 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. 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 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 IEC National Committees.
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This redline version of the official IEC Standard allows the user to identify the changes made to the previous edition IEC 62877-1:2016. A vertical bar appears in the margin wherever a change has been made. Additions are in green text, deletions are in strikethrough red text.

IEC 62877-1 has been prepared by IEC technical committee 21: Secondary cells and batteries. It is an International Standard.

This second edition cancels and replaces the first edition published in 2016. This edition constitutes a technical revision.

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

a) Addition of the concentration values of halogens in Table 4.

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

Draft	Report on voting
21/1169/FDIS	21/1172/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.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/publications.

A list of all parts of the IEC 62877 series can be found, under the general title *Electrolyte and water for vented lead acid accumulators*, 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 webstore.iec.ch in the data related to the specific document. At this date, the document will be

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

ELECTROLYTE AND WATER FOR VENTED LEAD ACID ACCUMULATORS –

Part 1: Requirements for electrolyte

1 Scope

This part of IEC 62877 applies to electrolytes and their components used for filling vented lead acid batteries, for example with dry-charged cells or batteries, and for electrolyte replenishment, replacement or electrolyte density adjustment of batteries in operation. This document defines the composition, purity and properties of electrolyte, for application where specific instructions from the battery manufacturer are not available.

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 62877-2, Electrolyte and water for vented lead acid accumulators – Part 2: Requirements for water



SVENSK STANDARD SS-EN IEC 62877-1, utg 2:2024

Fastställd 2024-05-22

Sida

Ansvarig kommitté

SEK TK 21

4-05-22 1 (16)

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Elektrolyt och vatten för ventilerade blybatterier – Del 1: Fordringar på elektrolyt

Electrolyte and water for vented lead acid accumulators – Part 1: Requirements for electrolyte

Som svensk standard gäller europastandarden EN IEC 62877-1:2023. Den svenska standarden innehåller den officiella engelska språkversionen av EN IEC 62877-1:2023.

Nationellt förord

Europastandarden EN IEC 62877-1:2023

består av:

- europastandardens ikraftsättningsdokument, utarbetat inom CENELEC
- IEC 62877-1, Second edition, 2023 Electrolyte and water for vented lead acid accumulators –
 Part 1: Requirements for electrolyte

utarbetad inom International Electrotechnical Commission, IEC.

Tidigare fastställd svensk standard SS-EN 62877-1, utg 1:2016 med eventuella tillägg, ändringar och rättelser gäller ej fr o m 2026-10-18.

ICS 29.220.20

Standarder underlättar utvecklingen och höjer elsäkerheten

Det finns många fördelar med att ha gemensamma tekniska regler för bl a mätning, säkerhet och provning och för utförande, skötsel och dokumentation av elprodukter och elanläggningar.

Genom att utforma sådana standarder blir säkerhetsfordringar tydliga och utvecklingskostnaderna rimliga samtidigt som marknadens acceptans för produkten eller tjänsten ökar.

Många standarder inom elområdet beskriver tekniska lösningar och metoder som åstadkommer den elsäkerhet som föreskrivs av svenska myndigheter och av EU.

SEK är Sveriges röst i standardiseringsarbetet inom elområdet

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SEK samordnar svenska intressenters medverkan i SEKs tekniska kommittéer och stödjer svenska experters medverkan i internationella och europeiska projekt.

Stora delar av arbetet sker internationellt

Utformningen av standarder sker i allt väsentligt i internationellt och europeiskt samarbete. SEK är svensk nationalkommitté av International Electrotechnical Commission (IEC) och Comité Européen de Normalisation Electrotechnique (CENELEC).

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EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN IEC 62877-1

October 2023

ICS 29.220.20

Supersedes EN 62877-1:2016; EN 62877-1:2016/AC:2017-05

English Version

Electrolyte and water for vented lead acid accumulators - Part 1: Requirements for electrolyte (IEC 62877-1:2023)

Electrolyte et eau pour accumulateurs plomb-acide ouverts
- Partie 1: Exigences pour l'électrolyte
(IEC 62877-1:2023)

Elektrolyt und Wasser für geschlossene Blei-Akkumulatoren
- Teil 1: Anforderungen an den Elektrolyt
(IEC 62877-1:2023)

This European Standard was approved by CENELEC on 2023-10-18. 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 CEN-CENELEC Management Centre 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 CEN-CENELEC Management Centre has the same status as the official versions.

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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

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Ref. No. EN IEC 62877-1:2023 E

European foreword

The text of document 21/1169/FDIS, future edition 2 of IEC 62877-1, prepared by IEC/TC 21 "Secondary cells and batteries" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 62877-1:2023.

The following dates are fixed:

- latest date by which the document has to be implemented at national (dop) 2024-07-18 level by publication of an identical national standard or by endorsement
- latest date by which the national standards conflicting with the (dow) 2026-10-18 document have to be withdrawn

This document supersedes EN 62877-1:2016 and all of its amendments and corrigenda (if any).

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Any feedback and questions on this document should be directed to the users' national committee. A complete listing of these bodies can be found on the CENELEC website.

Endorsement notice

The text of the International Standard IEC 62877-1:2023 was approved by CENELEC as a European Standard without any modification.

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

IEC 62485-2 NOTE Approved as EN IEC 62485-2

IEC 62485-3 NOTE Approved as EN 62485-3

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.cencenelec.eu.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	EN/HD	<u>Year</u>
IEC 62877-2	-	Electrolyte and water for vented lead acid accumulators - Part 2: Requirements for water	EN 62877-2	-



Edition 2.0 2023-09

INTERNATIONAL STANDARD

NORME INTERNATIONALE

Electrolyte and water for vented lead acid accumulators – Part 1: Requirements for electrolyte

Electrolyte et eau pour accumulateurs plomb-acide ouverts – Partie 1: Exigences pour l'électrolyte

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

COMMISSION ELECTROTECHNIQUE INTERNATIONALE

ICS 29.220.20 ISBN 978-2-8322-7424-8

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Part 1: Requirements for electrolyte

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