



IEC 62877-1

Edition 2.0 2023-09  
REDLINE VERSION

# INTERNATIONAL STANDARD



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

INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

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ICS 29.220.20

ISBN 978-2-8322-7550-4

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

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**ELECTROLYTE AND WATER FOR VENTED  
LEAD ACID ACCUMULATORS –****Part 1: Requirements for electrolyte****FOREWORD**

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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](http://www.iec.ch/members_experts/refdocs). The main document types developed by IEC are described in greater detail at [www.iec.ch/publications](http://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.

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- 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*

# INTERNATIONAL STANDARD

# NORME INTERNATIONALE

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**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**

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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.
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# 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 with dry-charged cells 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

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

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## COMMISSION ÉLECTROTECHNIQUE INTERNATIONALE

**ÉLECTROLYTE ET EAU POUR ACCUMULATEURS  
PLOMB-ACIDE OUVERTS –****Partie 1: Exigences pour l'électrolyte****AVANT-PROPOS**

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Cette deuxième édition annule et remplace la première édition parue en 2016. Cette édition constitue une révision technique.

Cette édition inclut les modifications techniques majeures suivantes par rapport à l'édition précédente:

- a) Ajout des valeurs de concentration des halogènes dans le Tableau 4.

Le texte de cette Norme internationale est issu des documents suivants:

Projet	Rapport de vote
21/1169/FDIS	21/1172/RVD

Le rapport de vote indiqué dans le tableau ci-dessus donne toute information sur le vote ayant abouti à son approbation.

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Ce document a été rédigé selon les Directives ISO/IEC, Partie 2, il a été développé selon les Directives ISO/IEC, Partie 1 et les Directives ISO/IEC, Supplément IEC, disponibles sous [www.iec.ch/members\\_experts/refdocs](http://www.iec.ch/members_experts/refdocs). Les principaux types de documents développés par l'IEC sont décrits plus en détail sous [www.iec.ch/publications](http://www.iec.ch/publications).

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# ÉLECTROLYTE ET EAU POUR ACCUMULATEURS PLOMB-ACIDE OUVERTS –

## Partie 1: Exigences pour l'électrolyte

### 1 Domaine d'application

La présente partie de l'IEC 62877 s'applique aux électrolytes et à leurs composants utilisés pour le remplissage des batteries plomb-acide ouvertes avec éléments chargés secs et pour le réapprovisionnement, le remplacement de l'électrolyte ou le réglage de la densité de l'électrolyte des batteries en fonctionnement. Le présent document définit la composition, la pureté et les propriétés de l'électrolyte pour application en l'absence d'instructions spécifiques du fabricant de batteries.

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IEC 62877-2, *Électrolyte et eau pour accumulateurs plomb-acide ouverts – Partie 2: Exigences pour l'eau*