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Secondary cells and batteries containing alkaline or other non-acid electrolytes – Safety requirements for secondary lithium cells and batteries, for use in industrial applications

Accumulateurs alcalins et autres accumulateurs à électrolyte non acide – Exigences de sécurité pour les accumulateurs au lithium pour utilisation dans des applications industrielles



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INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

COMMISSION
ELECTROTECHNIQUE
INTERNATIONALE

ICS 29.220.30

ISBN 978-2-8322-3869-1

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CONTENTS

FOREWORD.....	4
1 Scope.....	6
2 Normative references	6
3 Terms and definitions	7
4 Parameter measurement tolerances	9
5 General safety considerations	10
5.1 General.....	10
5.2 Insulation and wiring.....	10
5.3 Venting	10
5.4 Temperature/voltage/current management.....	10
5.5 Terminal contacts of the battery pack and/or battery system	10
5.6 Assembly of cells, modules, or battery packs into battery systems.....	11
5.6.1 General	11
5.6.2 Battery system design	11
5.7 Operating region of lithium cells and battery systems for safe use	11
5.8 Quality plan	11
6 Type test conditions	12
6.1 General.....	12
6.2 Test items.....	12
7 Specific requirements and tests.....	13
7.1 Charging procedures for test purposes	13
7.2 Reasonably foreseeable misuse.....	13
7.2.1 External short-circuit test (cell or cell block).....	13
7.2.2 Impact test (cell or cell block)	14
7.2.3 Drop test (cell or cell block, and battery system).....	15
7.2.4 Thermal abuse test (cell or cell block).....	17
7.2.5 Overcharge test (cell or cell block).....	18
7.2.6 Forced discharge test (cell or cell block).....	18
7.3 Considerations for internal short-circuit – Design evaluation	19
7.3.1 General	19
7.3.2 Internal short-circuit test (cell)	19
7.3.3 Propagation test (battery system)	20
8 Battery system safety (considering functional safety).....	20
8.1 General requirements	20
8.2 Battery management system (or battery management unit).....	21
8.2.1 Requirements for the BMS.....	21
8.2.2 Overcharge control of voltage (battery system).....	22
8.2.3 Overcharge control of current (battery system)	23
8.2.4 Overheating control (battery system)	24
9 Information for safety.....	24
10 Marking and designation.....	24
Annex A (normative) Operating region of cells for safe use.....	25
A.1 General.....	25
A.2 Charging conditions for safe use.....	25
A.3 Consideration on charging voltage	25
A.4 Consideration on temperature	26

A.5	High temperature range	26
A.6	Low temperature range	26
A.7	Discharging conditions for safe use.....	26
A.8	Example of operating region	27
Annex B (informative)	Procedure of propagation test (see 7.3.3).....	28
B.1	General.....	28
B.2	Test conditions	28
B.3	Methods for initiating the thermal runaway can include	28
Annex C (informative)	Packaging	29
Bibliography.....		30
Figure 1	– Configuration of the impact test.....	15
Figure 2	– Impact location.....	17
Figure 3	– Configuration for the shortest edge drop test.....	17
Figure 4	– Configuration for the corner drop test.....	17
Figure 5	– Examples of BMS locations and battery system configurations.....	22
Figure 6	– Example of the circuit configuration for overcharge control of voltage	23
Figure A.1	– An example of operating region for charging of typical lithium-ion cells.....	27
Figure A.2	– An example of operating region for discharging of typical lithium-ion cells	27
Table 1	– Sample size for type tests	13
Table 2	– Drop test method and condition	16

INTERNATIONAL ELECTROTECHNICAL COMMISSION

**SECONDARY CELLS AND BATTERIES CONTAINING
ALKALINE OR OTHER NON-ACID ELECTROLYTES –
SAFETY REQUIREMENTS FOR SECONDARY LITHIUM CELLS
AND BATTERIES, FOR USE IN INDUSTRIAL APPLICATIONS**

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International Standard IEC 62619 has been prepared by subcommittee 21A: Secondary cells and batteries containing alkaline or other non-acid electrolytes, of IEC technical committee 21: Secondary cells and batteries.

The text of this standard is based on the following documents:

FDIS	Report on voting
21A/617/FDIS	21A/624/RVD

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

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

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

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SECONDARY CELLS AND BATTERIES CONTAINING ALKALINE OR OTHER NON-ACID ELECTROLYTES – SAFETY REQUIREMENTS FOR SECONDARY LITHIUM CELLS AND BATTERIES, FOR USE IN INDUSTRIAL APPLICATIONS

1 Scope

This document specifies requirements and tests for the safe operation of secondary lithium cells and batteries used in industrial applications including stationary applications.

When there exists an IEC standard specifying test conditions and requirements for cells used in special applications and which is in conflict with this document, the former takes precedence (e.g., IEC 62660 series on road vehicles).

The following are some examples of applications that utilize cells and batteries under the scope of this document.

- Stationary applications: telecom, uninterruptible power supplies (UPS), electrical energy storage system, utility switching, emergency power, and similar applications.
- Motive applications: forklift truck, golf cart, auto guided vehicle (AGV), railway, and marine, excluding road vehicles.

Since this document covers batteries for various industrial applications, it includes those requirements, which are common and minimum to the various applications.

Electrical safety is included only as a part of the risk analysis of Clause 8. In regard to details for addressing electrical safety, the end use application standard requirements have to be considered.

This document applies to cells and batteries. If the battery is divided into smaller units, the smaller unit can be tested as the representative of the battery. The manufacturer clearly declares the tested unit. The manufacturer may add functions, which are present in the final battery to the tested unit.

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 62133:2012, *Secondary cells and batteries containing alkaline or other non-acid electrolytes – Safety requirements for portable sealed secondary cells, and for batteries made from them, for use in portable applications*

IEC 62620:2014, *Secondary cells and batteries containing alkaline or other non-acid electrolytes – Secondary lithium cells and batteries for use in industrial applications*

ISO/IEC Guide 51, *Safety aspects – Guidelines for their inclusion in standards*