

ICS 29.220

CCS K82



**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB 21966-2008

**Safety of primary and secondary lithium cells and batteries
during transport**

锂原电池和蓄电池在运输中的安全要求

(English Translation)

Issued on: June 13, 2008

Implemented on: July 1, 2009

**Issued by: General Administration of Quality Supervision, Inspection and
Quarantine of the People's Republic of China;
Standardization Administration of China**

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Foreword

Clauses 4, 5, 6 and 9 of this Standard are mandatory clauses. Requirements specified in this Standard do not apply in those cases where special provisions given in the relevant regulations of China (see 7.3), provide exemptions.

This Standard is identical to IEC 62281.2004 "Safety of primary and secondary lithium cells and batteries during transport".

This Standard was proposed by China National Light Industry Council.

This Standard shall be under the jurisdiction of National Technical Committee on Primary Battery of Standardization Administration of China (SAC/TC 176).

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This Standard is issued for the first time.

1 Scope

This Standard specifies test methods and requirements for primary and secondary (rechargeable) lithium cells and batteries to ensure their safety during transport (other than for recycling or disposal). Requirements specified in this Standard do not apply in those cases where special provisions given in the relevant regulations of China (see 7.3), provide exemptions.

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.

GB 8897.4 Primary batteries - Part 4.Safety of lithium batteries (GB 8897.4-2002, IEC 60086-4:2000, IDT)

3 Terms and definitions

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

Initial cycle of a secondary (rechargeable) cell or battery following completion of all manufacturing, formation and quality control processes.

4 Requirements for safety

Lithium cells and batteries shall be packaged so as to prevent an external short-circuit under normal transport conditions.

5 Type testing, sampling and re-testing

Each different type shall be tested by randomly taking samples. The number of samples is given in Table 1 below.

6 Test methods and requirements

The overall accuracy of controlled values (relative to the specified values) or measured values (relative to the actual parameters), shall be within the following tolerances.

Shifting is considered to have occurred during a test if one or more test cells or batteries are released from the packaging, do not retain their original orientation, or are affected in such a way that the occurrence of an external short-circuit or crushing cannot be excluded.

7 Information for safety

Regulations concerning international transport of lithium batteries are based on the recommendations of the United Nations Committee of Experts on the Transport of Dangerous Goods⁴).

8 Instructions for packaging and handling during transport

Packages that have been crushed, punctured or torn open to reveal contents shall not be transported. Such packages shall be isolated until the shipper has been consulted, has

9 Marking

Each package as offered for transport shall be marked with the following information (unless exempted by the relevant regulations).

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