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INTERNATIONAL STANDARD

NORME INTERNATIONALE

Lead-acid batteries for propulsion power of lightweight vehicles – General requirements and methods of test

Batteries au plomb pour la puissance de propulsion des véhicules légers – Exigences générales et méthodes d'essai

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LEAD-ACID BATTERIES FOR PROPULSION POWER OF LIGHTWEIGHT VEHICLES – GENERAL REQUIREMENTS AND METHODS OF TEST

FOREWORD

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International Standard IEC 63193 has been prepared by IEC technical committee 21: Secondary cells and batteries.

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

FDIS	Report on voting
21/1056/FDIS	21/1066/RVD

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

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

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under "http://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- withdrawn,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.

LEAD-ACID BATTERIES FOR PROPULSION POWER OF LIGHTWEIGHT VEHICLES – GENERAL REQUIREMENTS AND METHODS OF TEST

1 Scope

This document is applicable to lead-acid batteries powering electric two-wheelers (mopeds) and three-wheelers (e-rickshaws and delivery vehicles), and also to golf cars and similar light utility and multi-passenger vehicles.

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a) Electric two- and three-wheelers

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b) Electric golf car and light utility and multi-passenger vehicles

Figure 1 – Examples of vehicles covered by this document

Persons with a low level of technical skills as regards these vehicles and associated batteries, operate them most often in an environment with many bystanders who are unaware of the possible risks involved. The batteries have thus to be eminently reliable, consumer friendly and minimize risks of fire, explosions, electrical shocks and chemical burns.

These batteries are submitted to frequent and deep discharges with electrical power delivered to the propulsion system in short surges of high current when accelerating, followed by lower current levels when at cruising speed. The subsequent charge of the battery can also occur in areas accessible to the public.

The document specifies methods of tests tailored to batteries destined for the above-referenced types of vehicles so as to ensure satisfactory and safe battery performance in the intended application.

This document does not apply for example to lead acid cells and batteries used for:

- vehicle engine starting applications (IEC 60095 series);
- traction applications (IEC 60254 series);