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Lead-acid starter batteries - Part 5: Mechanical properties of battery housings and handles

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>See Eesti standard EVS-EN 50342-5:2025 sisaldab Euroopa standardi EN 50342-5:2025 ingliskeelset teksti.</p> <p>Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.</p> <p>Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 10.10.2025.</p> <p>Standard on kättesaadav Eesti Standardimis- ja Akrediteerimiskeskusest.</p>	<p>This Estonian standard EVS-EN 50342-5:2025 consists of the English text of the European standard EN 50342-5:2025.</p> <p>This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation.</p> <p>Date of Availability of the European standard is 10.10.2025.</p> <p>The standard is available from the Estonian Centre for Standardisation and Accreditation.</p>
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English Version

Lead-acid starter batteries - Part 5: Mechanical properties of battery housings and handles

Batteries d'accumulateurs de démarrage au plomb - Partie 5: Propriétés mécaniques des boîtiers et poignées de batteries

Blei-Akkumulatoren-Starterbatterien - Teil 5: Mechanische Eigenschaften von Batteriegehäusen und Griffen

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European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

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European foreword

This document (EN 50342-5:2025) has been prepared by CLC/TC 21X, "Secondary cells and batteries".

The following dates are fixed:

- latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2026-10-31
- latest date by which the national standards conflicting with this document have to be withdrawn (dow) 2028-10-31

This document supersedes EN 50342-5:2010 and all of its amendments and corrigenda (if any).

EN 50342-5:2025 includes the following significant technical changes with respect to EN 50342-5:2010:

- improvement of the structure and the wording of the document;
- clear definition of tests and requirement levels that need to be passed to state EN 50342-5 compliance;
- separation between test procedures and requirements;
- differentiation between system level tests and requirements compared to component level tests and requirements.

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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.

1 Scope

This document is applicable to housing and accessory parts of lead-acid batteries made of polypropylene.

Lead-acid batteries are used primarily as a power source for the starting of internal combustion engines, lighting and for auxiliary equipment of road vehicles. These batteries are all referred to as starter batteries.

This document is applicable to starter batteries for passenger cars and for commercial or industrial vehicles.

Battery housing and accessory parts according to this document do not provide any protection of the polypropylene against aging due to light. The parts are intended to be used within the engine compartment or within battery boxes where they are protected from light.

The purpose of this document is to define requirements for raw material used to produce housing and accessory parts for starter batteries, to define requirements of the physical properties of battery housing and to define uniform test procedures for validation.

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.

EN 50342-2, *Lead-acid starter batteries - Part 2: Dimensions of batteries and marking of terminals*

EN 50342-4, *Lead-acid starter batteries - Part 4: Dimensions of batteries for heavy vehicles*

EN ISO 527-1, *Plastics - Determination of tensile properties - Part 1: General principles (ISO 527-1)*

EN ISO 527-2, *Plastics - Determination of tensile properties - Part 2: Test conditions for moulding and extrusion plastics (ISO 527-2)*

IEC 60050-482, *International Electrotechnical Vocabulary – Part 482: Primary and secondary cells and batteries*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 60050-482 and the following apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp/>
- IEC Electropedia: available at <https://www.electropedia.org/>

3.1

battery case

container for the plate pack or packs and electrolyte of a cell or cells made of a material impervious to the electrolyte

[SOURCE: IEC 60050-482-02-14]

3.2

cell lid

battery lid

part used to close the case normally having holes for filling, topping-up, gas escape, terminals, etc

[SOURCE: IEC 60050-482-02-15]