

Textile-glass-reinforced plastics - Prepregs, moulding compounds and laminates - Determination of the textile-glass and mineral-filler content using calcination methods (ISO 1172:2023)

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>See Eesti standard EVS-EN ISO 1172:2023 sisaldab Euroopa standardi EN ISO 1172:2023 ingliskeelset teksti.</p> <p>Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas</p> <p>Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 06.09.2023.</p> <p>Standard on kättesaadav Eesti Standardimis- ja Akrediteerimiskeskusest.</p>	<p>This Estonian standard EVS-EN ISO 1172:2023 consists of the English text of the European standard EN ISO 1172:2023.</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 06.09.2023.</p> <p>The standard is available from the Estonian Centre for Standardisation and Accreditation.</p>
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ICS 83.120

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EUROPEAN STANDARD

EN ISO 1172

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English Version

Textile-glass-reinforced plastics - Prepregs, moulding
compounds and laminates - Determination of the textile-
glass and mineral-filler content using calcination methods
(ISO 1172:2023)

Plastiques renforcés de verre textile - Préimprégnés,
compositions de moulage et stratifiés - Détermination
des taux de verre textile et de charge minérale par des
méthodes calcination (ISO 1172:2023)

Textilglasverstärkte Kunststoffe - Prepregs,
Formmassen und Lamine - Bestimmung des
Textilglas- und Mineralfüllstoffgehalts mittels
Kalzinierungsverfahren (ISO 1172:2023)

This European Standard was approved by CEN on 1 September 2023.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

European foreword

This document (EN ISO 1172:2023) has been prepared by Technical Committee ISO/TC 61 "Plastics" in collaboration with Technical Committee CEN/TC 249 "Plastics" the secretariat of which is held by SIS.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by March 2024, and conflicting national standards shall be withdrawn at the latest by March 2024.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN ISO 1172:1998.

Any feedback and questions on this document should be directed to the users' national standards body/national committee. A complete listing of these bodies can be found on the CEN website.

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Endorsement notice

The text of ISO 1172:2023 has been approved by CEN as EN ISO 1172:2023 without any modification.

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 61, *Plastics*, Subcommittee SC 13, *Composites and reinforcement fibres*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 249, *Plastics*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This third edition cancels and replaces the second edition (ISO 1172:1996), which has been technically revised.

The main changes are as follows:

- more detailed definitions of procedures in [7.2](#) (Method A) have been added.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Textile-glass-reinforced plastics — Prepregs, moulding compounds and laminates — Determination of the textile-glass and mineral-filler content using calcination methods

WARNING — This document does not give details of the precautions that should be taken to meet health and safety requirements. The test methods described require the use of high temperatures and concentrated acids. It is the responsibility of the user of this document to follow the appropriate health and safety procedures.

1 Scope

This document specifies two calcination methods for the determination of the textile glass and mineral filler content of glass-reinforced plastics:

- Method A: for the determination of the textile glass content when no mineral fillers are present.
- Method B: for the determination of the textile-glass and mineral-filler content when both components are present.

This document is applicable to the following types of material:

- prepregs made from yarns, rovings, tapes or fabrics;
- SMC, BMC and DMC moulding compounds;
- textile-glass-reinforced thermoplastic moulding materials and granules;
- filled or unfilled textile-glass laminates made with thermosetting or thermoplastic resins.

The methods do not apply to the following types of reinforced plastic:

- those containing reinforcements other than textile glass;
- those containing materials which do not completely burn off at the test temperature (for example, those based on silicone resin);
- those containing mineral fillers which degrade at temperatures below the minimum calcination temperature.

NOTE For these materials, ISO 11667 can be used.

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.

ISO 472, *Plastics — Vocabulary*

ISO 8604, *Plastics — Prepregs — Definitions of terms and symbols for designations*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 472 and ISO 8604 apply.