



Institut luxembourgeois de la normalisation  
de l'accréditation, de la sécurité et qualité  
des produits et services

## ILNAS-EN ISO 1172:1998

### **Textile-glass-reinforced plastics - Prepregs, moulding compounds and laminates - Determination of the textile-glass and mineral-filler content**

Textilglasverstärkte Kunststoffe -  
Prepregs, Formmassen und Laminat -  
Bestimmung des Textilglas- und  
Mineralfüllstoffgehalts -

Plastiques renforcés de verre textile -  
Préimprégnés, compositions de moulage  
et stratifiés - Détermination des taux de  
verre textile et de charge minérale -

08/1998



## National Foreword

This European Standard EN ISO 1172:1998 was adopted as Luxembourgish Standard ILNAS-EN ISO 1172:1998.

Every interested party, which is member of an organization based in Luxembourg, can participate for FREE in the development of Luxembourgish (ILNAS), European (CEN, CENELEC) and International (ISO, IEC) standards:

- Participate in the design of standards
- Foresee future developments
- Participate in technical committee meetings

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EUROPEAN STANDARD <sup>ILNAS-EN ISO 1172:1998</sup> **EN ISO 1172**  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

August 1998

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ICS 83.120

Supersedes EN 60:1977

Descriptors: see ISO document

English version

**Textile-glass-reinforced plastics - Prepregs, moulding  
compounds and laminates - Determination of the textile-glass  
and mineral-filler content - Calcination methods (ISO 1172:1996)**

Plastiques renforcés de verre textile - Préimprégnés,  
compositions de moulage et stratifiés - Détermination des  
taux de verre textile et de charge minérale - Méthodes par  
calcination (ISO 1172:1996)

Textilglasverstärkte Kunststoffe - Prepregs, Formmassen  
und Lamine - Bestimmung des Textilglas- und  
Mineralfüllstoffgehalts - Kalzinierungsverfahren (ISO  
1172:1996)

This European Standard was approved by CEN on 3 August 1998.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.



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

**Central Secretariat: rue de Stassart, 36 B-1050 Brussels**

## Foreword

The text of the International Standard from Technical Committee ISO/TC 61 "Plastics" of the International Organization for Standardization (ISO) has been taken over as an European Standard by Technical Committee CEN/TC 249 "Plastics", the secretariat of which is held by IBN.

This European Standard replaces EN 60:1977.

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 February 1999, and conflicting national standards shall be withdrawn at the latest by February 1999.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

## Endorsement notice

The text of the International Standard ISO 1172:1996 has been approved by CEN as a European Standard without any modification.

# INTERNATIONAL STANDARD

**ISO**  
**1172**

Second edition  
1996-12-15

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

*Plastiques renforcés de verre textile — Préimprégnés, compositions de  
moulage et stratifiés — Détermination des taux de verre textile et de  
charge minérale — Méthodes par calcination*



Reference number  
ISO 1172:1996(E)

## 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.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 1172 was prepared by Technical Committee ISO/TC 61, *Plastics*, Subcommittee SC 13, *Composites and reinforcement fibres*.

This second edition cancels and replaces the first edition (ISO 1172:1975), which has been technically revised (an additional method, method B, has been included and the annex, which concerned the estimation of the standard deviation, has been replaced by annex A describing an alternative method of separating chopped glass fibre from mineral filler).

Annex A of this International Standard is for information only.

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

**WARNING** — This International Standard 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 International Standard to follow the appropriate health and safety procedures.

## 1 Scope

This International Standard 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 International Standard 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 are not applicable 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.

For these materials, ISO 11667, *Fibre-reinforced plastics — Moulding compounds and prepregs — Determination of resin, reinforcement-fibre and mineral-filler content — Dissolution method*, may be used.