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Standards

Irish Standard  
I.S. EN 16245-3:2013

# Fibre-reinforced plastic composites - Declaration of raw material characteristics - Part 3: Specific requirements for fibre

## I.S. EN 16245-3:2013

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English Version

## Fibre-reinforced plastic composites - Declaration of raw material characteristics - Part 3: Specific requirements for fibre

Composites plastiques renforcés de fibres - Déclaration des caractéristiques des matières premières - Partie 3: Exigences particulières pour les fibres

Faserverstärkte Verbundwerkstoffe - Angabe von Werkstoffeigenschaften - Teil 3: Spezifische Anforderungen an Fasern

This European Standard was approved by CEN on 21 March 2013.

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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 CEN-CENELEC Management Centre has the same status as the official versions.

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## Foreword

This document (EN 16245-3:2013) has been prepared by Technical Committee CEN/TC 249 “Plastics”, the secretariat of which is held by NBN.

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of an identical text or by endorsement, at the latest by November 2013, and conflicting national standards shall be withdrawn at the latest by November 2013.

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

EN 16245 consists of the following parts, under the general title *Fibre-reinforced plastic composites — Declaration of raw material characteristics*:

- *Part 1: General requirements*
- *Part 2: Specific requirements for resin, curing systems, additives and modifiers*
- *Part 3: Specific requirements for fibre (the present document)*
- *Part 4: Specific requirements for fabrics*
- *Part 5: Specific requirements for core materials*

According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

## 1 Scope

This European Standard specifies the minimum information to be declared for fibre material to be used for the manufacturing of composites products.

These specific declaration requirements are given in addition to the general requirements given in EN 16245-1.

This document includes requirements for the Certificate of Analysis (CoA). The purpose of the CoA is to verify that material properties and quality conforms to the declared values.

This part of the standard is applicable to carbon and glass fibre material.

## 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 16245-1:2013, *Fibre-reinforced plastics composites — Declaration of raw material characteristics — Part 1: General requirements*

EN ISO 291, *Plastics — Standard atmospheres for conditioning and testing (ISO 291)*

EN ISO 1889, *Reinforcement yarns — Determination of linear density (ISO 1889)*

EN ISO 1890, *Reinforcement yarns — Determination of twist (ISO 1890)*

EN ISO 3344, *Reinforcement products — Determination of moisture content (ISO 3344)*

EN ISO 9163, *Textile glass — Rovings — Manufacture of test specimens and determination of tensile strength of impregnated rovings (ISO 9163)*

EN ISO 10548:2003, *Carbon fibre — Determination of size content (ISO 10548:2002)*

EN ISO 10618, *Carbon fibre — Determination of tensile properties of resin-impregnated yarn (ISO 10618)*

ISO 1887, *Textile glass — Determination of combustible-matter content*

ISO 1888, *Textile glass — Staple fibres or filaments — Determination of average diameter*

ISO 10119:2002, *Carbon fibre — Determination of density*

ISO 15100, *Plastics — Reinforcement fibres — Chopped strands — Determination of bulk density*

ASTM D150-11, *Standard Test Methods for AC Loss Characteristics and Permittivity (Dielectric Constant) of Solid Electrical Insulation*

ASTM D578-05, *Standard Specification for Glass Fiber Strands*

ASTM D2970-04, *Standard Test Method for Testing Tire Cords, Tire Cord Fabrics, and Industrial Yarns Made From Glass Filaments*

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