



**NSAI**  
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

*Incorporating amendments/corrigenda/National Annexes issued since publication:*

The National Standards Authority of Ireland (NSAI) produces the following categories of formal documents:

I.S. xxx: Irish Standard – national specification based on the consensus of an expert panel and subject to public consultation.

S.R. xxx: Standard Recommendation - recommendation based on the consensus of an expert panel and subject to public consultation.

SWIFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

*This document replaces:*

*This document is based on:*  
EN 16245-3:2013

*Published:*  
21 May, 2013

This document was published  
under the authority of the NSAI  
and comes into effect on:  
21 May, 2013

**ICS number:**

83.120

**NSAI**  
1 Swift Square,  
Northwood, Santry  
Dublin 9

T +353 1 807 3800  
F +353 1 807 3838  
E standards@nsai.ie  
W NSAI.ie

**Sales:**  
T +353 1 857 6730  
F +353 1 857 6729  
W standards.ie

Údarás um Chaighdeáin Náisiúnta na hÉireann

ICS 83.120

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.

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

CEN members are the national standards bodies of 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 United Kingdom.



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

**Management Centre: Avenue Marnix 17, B-1000 Brussels**

<b>Contents</b>	<b>Page</b>
<b>Foreword.....</b>	<b>3</b>
<b>1 Scope .....</b>	<b>4</b>
<b>2 Normative references .....</b>	<b>4</b>
<b>3 Terms and definitions .....</b>	<b>5</b>
<b>4 Content of a declaration.....</b>	<b>6</b>
<b>5 Specific declaration requirements .....</b>	<b>6</b>
<b>5.1 General.....</b>	<b>6</b>
<b>5.2 Properties of carbon fibre .....</b>	<b>6</b>
<b>5.3 Properties of glass fibre.....</b>	<b>8</b>
<b>Bibliography .....</b>	<b>12</b>

## 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*

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

- 
- Looking for additional Standards? Visit Intertek Inform Infostore
  - Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation
-