

Fibre-reinforced plastic composites - Declaration of raw material characteristics - Part 5: Specific requirements for core materials

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English Version

Fibre-reinforced plastic composites - Declaration of raw material characteristics - Part 5: Specific requirements for core materials

Composites plastiques renforcés de fibres - Déclaration des caractéristiques des matières premières - Partie 5: Exigences particulières pour les matériaux d'âme

Faserverstärkte Verbundwerkstoffe - Angabe von Werkstoffeigenschaften - Teil 5: Spezifische Anforderungen an den Kernwerkstoff

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Foreword

This document (EN 16245-5:2013) 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of an identical text or by endorsement, at the latest by November 2013, and conflicting national standards shall be withdrawn at the latest by November 2013.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*
- *Part 4: Specific requirements for fabrics*
- *Part 5: Specific requirements for core materials* (the present document)

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1 Scope

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

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

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

This part of the standard is applicable to rigid foam and balsa core 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 plastic composites — Declaration of raw material characteristics — Part 1: General requirements*

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

EN ISO 844, *Rigid cellular plastics — Determination of compression properties (ISO 844)*

EN ISO 845, *Cellular plastics and rubbers — Determination of apparent density (ISO 845)*

ISO 1922, *Rigid cellular plastics — Determination of shear strength*

ISO 8301, *Thermal insulation — Determination of steady-state thermal resistance and related properties — Heat flow meter apparatus*

ASTM C273, *Standard Test Method for Shear Properties of Sandwich Core Materials*

ASTM C297, *Standard Test Method for Flatwise Tensile Strength of Sandwich Constructions*

ASTM C365, *Standard Test Method for Flatwise Compressive Properties of Sandwich Cores*

ASTM D1623, *Standard Test Method for Tensile and Tensile Adhesion Properties of Rigid Cellular Plastics*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1

core material

central component of a sandwich construction to which the sandwich faces or skins are attached

3.2

balsa core material

rigid balsa sheets cut in end-grain configuration to assure good compressive properties normal to the plane