Reinforced thermosetting moulding compounds - Specification for Sheet Moulding Compound (SMC) and Bulk Moulding Compound (BMC) - Part 3: Specific requirements

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 14598-3:2005 sisaldab Euroopa standardi EN 14598-3:2005 ingliskeelset teksti.

Käesolev dokument on jõustatud 22.06.2005 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 14598-3:2005 consists of the English text of the European standard EN 14598-3:2005.

This document is endorsed on 22.06.2005 with the notification being published in the official publication of the Estonian national standardisation organisation.

The standard is available from Estonian standardisation organisation.

Käsitlusala:

This part of EN 14598 specifies the requirements for physical and chemical properties of Sheet moulding Compounds (SMC) and Bulk Moulding Compound (BMC) and compression or injection moulded specimens. The selection in this part is limited to those materials the composition and properties of which are significantly different.

Scope:

This part of EN 14598 specifies the requirements for physical and chemical properties of Sheet moulding Compounds (SMC) and Bulk Moulding Compound (BMC) and compression or injection moulded specimens. The selection in this part is limited to those materials the composition and properties of which are significantly different.

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Reinforced thermosetting moulding compounds - Specification for Sheet Moulding Compound (SMC) and Bulk Moulding Compound (BMC) - Part 3: Specific requirements

Mélanges à mouler thermodurcissables renforcés -Spécification pour mats préimprégnés (SMC) et mélanges à mouler en masse (BMC) - Partie 3 : Exigences spécifiques Verstärkte härtbare Formmassen - Spezifikation für Harzmatten (SMC) und faserverstärkte Pressmassen (BMC) - Teil 3: Spezifische Anforderungen

This European Standard was approved by CEN on 21 February 2005.

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, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



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

Management Centre: rue de Stassart, 36 B-1050 Brussels

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Foreword

This document (EN 14598-3:2005) has been prepared by Technical Committee CEN/TC 249 "Plastics", the secretariat of which is held by IBN.

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 October 2005, and conflicting national standards shall be withdrawn at the latest by October 2005.

EN 14598 consists of the following parts, under the general title Reinforced thermosetting moulding compounds – Specification for Sheet Moulding Compound (SMC) and Bulk Moulding Compound (BMC)

- Part 1: Designation
- Part 2: Methods of test and general requirements
- Part 3: Specific requirements

This document includes a Bibliography.

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

Scope

This part of EN 14598 specifies the requirements for physical and chemical properties of Sheet moulding Compounds (SMC) and Bulk Moulding Compound (BMC) and compression or injection moulded specimens. The selection in this part is limited to those materials the composition and properties of which are significantly different.

Furthermore the selection is limited to those materials which are of more general technical and/or economical importance.

The properties which are used for the characterization of the moulding compounds, the test methods and the test conditions are based on Part 2 of this document. The list of properties is selected, initially, from those general test methods found in EN ISO 10350-2, Plastics - Acquisition and presentation of comparable single-point data -Part 2: Long-fibre-reinforced plastics (ISO 10350-2:2001).

The moulding compounds are divided into types corresponding to their composition and properties. The designation of the types of moulding compounds is based on Part 1 - Designation of this document.

2 Normative references

The following referenced documents are indispensable for the application 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.

EN 60695-11-10, Fire hazard testing - Part 11-10: Test flames - 50 W horizontal and vertical flame test methods (IEC 60695-11-10:1999)

EN 60707, Flammability of solid non-metallic materials when exposed to flame sources – List of test methods (IEC 60707:1999)

EN ISO 295, Plastics - Compression moulding of test specimens of thermosetting materials. (ISO 295:2004)

EN ISO 12114, Fibre-reinforced plastics - Thermosetting moulding compounds and prepregs - Determination of cure characteristics (ISO 12114:1997)

EN ISO 12115, Fibre-reinforced plastics -Thermosetting moulding compounds and prepregs - Determination of flowability, maturation and shelf life (ISO 12115:1997)

ISO 3795, Road vehicles, and tractors and machinery for agriculture and forestry - Determination of burning behaviour of interior materials

Terms and definitions 3

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

3.1

Sheet Moulding Compound

reinforced thermosetting moulding material, flat sheets

3.2

Bulk Moulding Compound - BMC

reinforced thermosetting moulding materials, bulk

3.3

thermal flow

characterizes the flow behaviour of plastizised thermosetting moulding compounds, e.g. when filling a mould cavity and for which the minimum torque