

Resin based reactive compounds used for electrical insulation —

Part 3: Specifications for individual materials —

Sheet 5: Unsaturated polyester based impregnating resins

The European Standard EN 60455-3-5:2006 has the status of a
British Standard

ICS 29.035.01

National foreword

This British Standard is the official English language version of EN 60455-3-5:2006. It is identical with IEC 60455-3-5:2006. It supersedes BS EN 60455-3-5:2002 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee GEL/15, Standards on specifications for electrical insulating materials, which has the responsibility to:

- aid enquirers to understand the text;
- present to the responsible international/European committee any enquiries on the interpretation, or proposals for change, and keep UK interests informed;
- monitor related international and European developments and promulgate them in the UK.

A list of organizations represented on this committee can be obtained on request to its secretary.

Cross-references

The British Standards which implement international or European publications referred to in this document may be found in the *BSI Catalogue* under the section entitled “International Standards Correspondence Index”, or by using the “Search” facility of the *BSI Electronic Catalogue* or of British Standards Online.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

Summary of pages

This document comprises a front cover, an inside front cover, the EN title page, pages 2 to 11 and a back cover.

The BSI copyright notice displayed in this document indicates when the document was last issued.

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 31 May 2006

© BSI 2006

ISBN 0 580 48423 8

Amendments issued since publication

Amd. No.	Date	Comments

Resin based reactive compounds used for electrical insulation
Part 3: Specifications for individual materials
Sheet 5: Unsaturated polyester based impregnating resins
(IEC 60455-3-5:2006)

Composés réactifs à base de résines
utilisés comme isolants électriques
Partie 3: Spécifications
pour matériaux particuliers
Feuille 5: Résines d'imprégnation à base
de polyester insaturé
(CEI 60455-3-5:2006)

Reaktionsharzmassen
für die Elektroisolierung
Teil 3: Anforderungen
an einzelne Werkstoffe
Blatt 5: Imprägnierharzwerkstoffe
auf Basis ungesättigter Polyester
(IEC 60455-3-5:2006)

This European Standard was approved by CENELEC on 2006-02-01. CENELEC 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 CENELEC 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 CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Foreword

The text of document 15/237/FDIS, future edition 3 of IEC 60455-3-5, prepared by IEC TC 15, Standards on specifications for electrical insulating materials, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60455-3-5 on 2006-02-01.

This European Standard supersedes 60455-3-5:2001.

The major changes from EN 60455-3-5:2001 concern the introduction of unsaturated polyester with low emission of volatile organic components. A definition, requirements and a test method for curing in thick layer and emissions during curing were added.

The following dates were fixed:

- | | | |
|--|-------|------------|
| – latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement | (dop) | 2006-11-01 |
| – latest date by which the national standards conflicting with the EN have to be withdrawn | (dow) | 2009-02-01 |

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 60455-3-5:2006 was approved by CENELEC as a European Standard without any modification.

CONTENTS

INTRODUCTION.....	4
1 Scope	5
2 Normative references	5
3 Terms and definitions	6
4 Designation	6
5 Requirements	6
5.1 Flash point	7
5.2 Density.....	7
5.3 Viscosity.....	7
5.4 Curing in thick layer and emissions during curing	7
5.5 Effect of the reactive compound on enamelled wires.....	8
5.6 Temperature index.....	8
5.7 Resistance to vapour of solvents.....	8
5.8 Effect of water immersion on volume resistivity	8
Annex A (normative) Curing in thick layer and determination of emissions.....	9
Annex ZA (normative) Normative references to international publications with their corresponding European publications.....	11