



NSAI
Standards

Irish Standard
I.S. EN 60455-3-8:2013

Resin based reactive compounds used
for electrical insulation -- Part 3:
Specifications for individual materials
-- Sheet 8: Resins for cable accessories
(IEC 60455-3-8:2013 (EQV))

I.S. EN 60455-3-8:2013

Incorporating amendments/corrigenda issued since publication:

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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
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EUROPEAN STANDARD

EN 60455-3-8

NORME EUROPÉENNE

EUROPÄISCHE NORM

July 2013

ICS 29.035.01

English version

**Resin based reactive compounds used for electrical insulation -
Part 3: Specifications for individual materials -
Sheet 8: Resins for cable accessories
(IEC 60455-3-8:2013)**

Composés réactifs à base de résines
utilisés comme isolants électriques -
Partie 3: Spécifications pour matériaux
particuliers -
Feuille 8: Résines pour accessoires de
câble
(CEI 60455-3-8:2013)

Reaktionsharzmassen für die
Elektroisolierung – Teil 3: Anforderungen
an einzelne Werkstoffe – Blatt 8:
Reaktionsharzmassen für Kabelgarnituren
(IEC 60455-3-8:2013)

This European Standard was approved by CENELEC on 2013-06-03. 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 CEN-CENELEC Management Centre or to any CENELEC member.

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CENELEC

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

Management Centre: Avenue Marnix 17, B - 1000 Brussels

Foreword

The text of document 15/701/FDIS, future edition 1 of IEC 60455-3-8, prepared by IEC/TC 15 "Solid electrical insulating materials", was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 60455-3-8:2013.

The following dates are fixed:

- latest date by which the document has (dop) 2014-03-03 to be implemented at national level by publication of an identical national standard or by endorsement
- latest date by which the national (dow) 2016-06-03 standards conflicting with the document have to be withdrawn

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

Endorsement notice

The text of the International Standard IEC 60455-3-8:2013 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 60455-1	NOTE Harmonized as EN 60455-1.
IEC 60455-3 series	NOTE Harmonized in EN 60455-3 series (not modified).
IEC 61234-2	NOTE Harmonized as EN 61234-2.
ISO 291	NOTE Harmonized as EN ISO 291.
ISO 2592	NOTE Harmonized as EN ISO 2592.
ISO 3521	NOTE Harmonized as EN ISO 3521.

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

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.

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60093	-	Methods of test for volume resistivity and surface resistivity of solid electrical insulating materials	HD 429 S1 ¹⁾	-
IEC 60212	-	Standard conditions for use prior to and during the testing of solid electrical insulating materials	EN 60212	-
IEC 60243-1	-	Electrical strength of insulating materials - Test methods - Part 1: Tests at power frequencies	EN 60243-1	-
IEC 60250	-	Recommended methods for the determination of the permittivity and dielectric dissipation factor of electrical insulating materials at power, audio and radio frequencies including metre wavelengths		-
IEC 60455-2	-	Resin based reactive compounds used for electrical insulation - Part 2: Methods of test	EN 60455-2	-
ISO 179	Series	Plastics - Determination of Charpy impact properties	EN ISO 179	Series
ISO 527	Series	Plastics - Determination of tensile properties	EN ISO 527	Series
ISO 868	-	Plastics and ebonite - Determination of indentation hardness by means of a durometer (Shore hardness)	EN ISO 868	-
ISO 1183-1	-	Plastics - Methods for determining the density of non-cellular plastics - Part 1: Immersion method, liquid pycnometer method and titration method	EN ISO 1183-1	-
ISO 2555	-	Plastics - Resins in the liquid state or as emulsions or dispersions - Determination of apparent viscosity by the Brookfield test method	EN ISO 2555	-
ISO 4895	-	Plastics - Liquid epoxy resins - Determination of tendency to crystallize	EN ISO 4895	-

¹⁾ HD 429 S1 is superseded by EN 62631-1:2011, which is based on IEC 62631-1:2011.

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**RESIN BASED REACTIVE COMPOUNDS
USED FOR ELECTRICAL INSULATION –**
**Part 3: Specifications for individual materials
Sheet 8: Resins for cable accessories**

FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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International Standard IEC 60455-3-8 has been prepared by IEC technical committee 15: Solid electrical insulating materials, in collaboration with working group 11 of Cenelec technical committee 20.

The text of this standard is based on the following documents:

FDIS	Report on voting
15/701/FDIS	15/711/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all the parts in the IEC 60455 series, published under the general title *Resin based reactive compounds used for electrical insulation*, can be found on the IEC website.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC web site under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

INTRODUCTION

This part of IEC 60455-3-8 is one of a series which deals with specifications for reactive compounds and their components for electrical insulation. This series consist of three parts:

Part 1: Definitions and general requirements (IEC 60455-1);

Part 2: Methods of test (IEC 60455-2);

Part 3: Specifications for individual materials (IEC 60455-3)

IEC 60455-3-8 consists of one of the sheets comprising Part 3 as follows:

Sheet 8: Resins for cable accessories

RESIN BASED REACTIVE COMPOUNDS USED FOR ELECTRICAL INSULATION –

Part 3: Specifications for individual materials Sheet 8: Resins for cable accessories

1 Scope

This sheet 8 of IEC 60455-3 gives the requirements for resins for power cable accessories which conform to this specification and meet established levels of performance. However, the selection of a material by a user for a specific application should be based on the actual requirements necessary for adequate performance in that application and not on this specification alone.

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.

IEC 60093, *Methods of test for volume resistivity and surface resistivity of solid electrical insulating materials*

IEC 60212, *Standard conditions for use prior to and during the testing of solid electrical insulating materials*

IEC 60243-1, *Electric strength of insulating materials – Test methods – Part 1: Tests at power frequencies*

IEC 60250, *Recommended methods for the determination of the permittivity and dielectric dissipation factor of electrical insulating materials at power, audio and radio frequencies including metre wavelengths*

IEC 60455-2, *Resin based reactive compounds used for electrical insulation – Part 2: Methods of test*¹

ISO 179 (all parts), *Plastics – Determination of Charpy impact properties*

ISO 527 (all parts), *Plastics – Determination of tensile properties*

ISO 868, *Plastics and ebonite – Determination of indentation hardness by means of a durometer (Shore hardness)*

ISO 1183-1, *Plastics – Methods for determining the density of non-cellular plastics – Part 1: Immersion method, liquid pycnometer method and titration method*

ISO 2555, *Plastics – Resins in the liquid state or as emulsions or dispersions – Determination of apparent viscosity by the Brookfield Test method*

¹ Third edition to be published.

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