Irish Standard
I.S. EN 60626-1:2012

Combined flexible materials for electrical insulation -- Part 1: Definitions and general requirements (IEC 60626-1:2009 (EQV))

I.S. EN 60626-1:2012

Incorporating amendments/corrigenda issued since publication:

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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:*	*Published:*
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I.S. EN 60626-1:2012

EUROPEAN STANDARD

NORME EUROPÉENNE

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EN 60626-1

May 2012

ICS 29.035.01

Supersedes EN 60626-1:1995 + A1:1996

English version

Combined flexible materials for electrical insulation - Part 1: Definitions and general requirements
(IEC 60626-1:2009)

Matériaux combinés souples destinés à l'isolement électrique -
Partie 1: Définitions et exigences générales
(CEI 60626-1:2009)

Flexible Mehrschichtisolierstoffe zur elektrischen Isolierung -
Teil 1: Definitionen und allgemeine Anforderungen
(IEC 60626-1:2009)

This European Standard was approved by CENELEC on 2012-03-23. 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.

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

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, 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, Turkey and the United Kingdom.

CENELEC

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

Management Centre: Avenue Marnix 17, B - 1000 Brussels

Ref. No. EN 60626-1:2012 E

Foreword

The text of document 15/469/CDV, future edition 3 of IEC 60626-1, prepared by IEC/TC 15 "Solid electrical insulating materials" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 60626-1:2012.

The following dates are fixed:

• latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	2012-12-23
• latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2015-03-23

This document supersedes EN 60626-1:1995 + A1:1996.

EN 60626-1:2012 includes the following significant technical changes with respect to EN 60626-1:1995:

The Scope was revised specifying treatment of mica paper, and Table 1 was revised cancelling materials no longer in use and introducing newer materials.

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 60626-1:2009 was approved by CENELEC as a European Standard without any modification.

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.

Publication	Year	Title	EN/HD	Year
IEC 60554-3-1	1979	Specification for cellulosic papers for electrical purposes - Part 3: Specifications for individual materials - Sheet 1: General purpose electrical paper	-	-
IEC 60626-3	2008	Combined flexible materials for electrical insulation - Part 3: Specifications for individual materials	EN 60626-3 + corr. October	2008 2008
IEC 60641-3-2	2007	Pressboard and presspaper for electrical purposes - Part 3: Specifications for individual materials - Sheet 2: Requirements for presspaper, types P.2.1, P.4.1, P.4.2, P.4.3 and P.6.1	EN 60641-3-2	2008
IEC 60674-3-2	1992	Specification for plastic films for electrical purposes - Part 3: Specifications for individual materials - Sheet 2: Requirements for balanced biaxially oriented polyethylene terephthalate (PET) films used for electrical insulation	EN 60674-3-2	1998
IEC 60674-3-4 to 6	1993	Specification for plastic films for electrical purposes - Part 3: Specifications for individual materials - Sheets 4 to 6: Requirements for polyimide films used for electrical insulation	EN 60674-3-4 to 6	1995
IEC 60674-3-8	-	Plastic films for electrical purposes - Part 3: Specifications for individual materials - Sheet 8: Balanced biaxially oriented polyethylene naphthalate (PEN) films used for electrical insulation	EN 60674-3-8	-
IEC 60819-3-1	2001	Non-cellulosic papers for electrical purposes - Part 3: Specifications for individual materials - Sheet 1: Filled glass paper	EN 60819-3-1	2001
IEC 60819-3-2	2001	Non-cellulosic papers for electrical purposes - Part 3: Specifications for individual materials - Sheet 2: Hybrid inorganic-organic paper	EN 60819-3-2	2001
IEC 60819-3-3 + corr. February	2006 2008	Non-cellulosic papers for electrical purposes - Part 3: Specifications for individual materials - Sheet 3: Unfilled aramid (aromatic polyamide) papers	EN 60819-3-3[1)]	2006

[1)] EN 60819-3-3 is superseded by EN 60819-3-3:2011, which is based on IEC 60819-3-3:2011.

Publication	Year	Title	EN/HD	Year
IEC 60819-3-4	2001	Non-cellulosic papers for electrical purposes - Part 3: Specifications for individual materials - Sheet 4: Aramid fibre paper containing not more than 50 % of mica particles	EN 60819-3-4	2001

INTERNATIONAL ELECTROTECHNICAL COMMISSION

COMBINED FLEXIBLE MATERIALS FOR ELECTRICAL INSULATION –

Part 1: Definitions and general requirements

FOREWORD

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International Standard IEC 60626-1 has been prepared by IEC technical committee 15: Solid electrical insulating materials.

This third edition cancels and replaces the second edition published in 1995 and its amendment 1 (1996), of which it constitutes a technical revision. The main changes from the previous edition are as follows:

The Scope was revised specifying treatment of mica paper, and Table 1 was revised cancelling materials no longer in use and introducing newer materials.

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

CDV	Report on voting
15/469/CDV	15/511/RVC

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 60626 series, under the general title *Combined flexible materials 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 maintenance result 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 International standard is one of a series which deals with combined flexible materials consisting of two or more different insulating materials laminated together. The components of the combined materials are plastic films and/or fibrous materials such as papers, woven or non-woven fabrics, impregnated or not impregnated.

This series consist of three parts describing:

Part 1: Definitions and general requirements (IEC 60626-1)

Part 2: Methods of test (IEC 60626-2)

Part 3: Specifications for individual materials (IEC 60626-3)

COMBINED FLEXIBLE MATERIALS FOR ELECTRICAL INSULATION –

Part 1: Definitions and general requirements

1 Scope

This part of IEC 60626 contains the definitions related to and the general requirements to be fulfilled by combined flexible materials for electrical insulation. This standard does not include mica paper, as primary component, covered by IEC 60371, but mica paper may be used as complementary material.

Materials which conform to this specification meet established levels of performance. However, the selection of material by a user for a specific application should be based on the actual requirements necessary for adequate performance in that application and not based on this specification alone.

SAFETY WARNING

It is the responsibility of the user of the methods contained or referred to in this document to ensure that they are used in a safe manner.

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.

NOTE The list of normative references is extensive because, in order to obtain a combination of two or more materials for electrical insulation, it is necessary that those base materials (paper, film, etc) shall conform to the requirements set forth, in the appropriate specification of the base material alone, for that purpose. This rule shall be applied also in the development of new possible combinations; to this end, specifications of materials not actually used, but referenced, may be eligible for future developments.

IEC 60554-3-1:1979, *Specification for cellulosic papers for electrical purposes – Part 3: Specifications for individual materials – Sheet 1: General purpose electrical paper*

IEC 60626-3:2008, *Combined flexible materials for electrical insulation – Part 3: Specifications for individual materials*

IEC 60641-3-2:2007, *Pressboard and presspaper for electrical purposes – Part 3: Specifications for individual materials – Sheet 2: Requirements for presspaper, types P.2.1, P.4.1, P.4.2, P.4.3 and P.6.1*

IEC 60674-3-2:1992, *Specification for plastic films for electrical purposes – Part 3: Specifications for individual materials – Sheet 2: Requirements for balanced biaxially oriented polyethylene terephthalate (PET) films used for electrical insulation*

IEC 60674-3-4:1993, *Specification for plastic films for electrical purposes – Part 3: Specifications for individual materials – Sheet 4: Requirements for polyimide (PI) films used for electrical insulation*