BS EN IEC 60674-3-4:2022

BSI Standards Publication

Plastic films for electrical purposes

Part 3: Specifications for individual materials Sheets 4:
Polyimide films used for electrical insulation

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National foreword

This British Standard is the UK implementation of EN IEC 60674-3-4:2022. It is identical to IEC 60674-3-4:2022. It supersedes BS EN 60674-3-4 to 6:1995, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee GEL/15, Solid electrical insulating materials.

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN IEC 60674-3-4

August 2022

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Supersedes EN 60674-3-4 to 6:1995

English Version

Plastic films for electrical purposes - Part 3: Specifications for individual materials - Sheets 4: Polyimide films used for electrical insulation

Films plastiques à usages électriques - Partie 3: Spécifications pour matériaux particuliers - Feuille 4: Films de polyimide utilisés dans l'isolation électrique

Isolierfolien für elektrotechnische Zwecke - Teil 3: Bestimmungen für einzelne Materialien - Blatt 4: Polyimid-Folien zur elektrischen Isolierung

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

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European foreword

The text of document 15/956/CDV, future edition 2 of IEC 60674-3-4, prepared by IEC/TC 15 "Solid electrical insulating materials" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 60674-3-4:2022.

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) 2023-04-27
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2025-07-27

This document supersedes EN 60674-3-4 to 6:1995 and all of its amendments and corrigenda (if any).

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The text of the International Standard IEC 60674-3-4:2022 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 60674-3 (series)	NOTE	Harmonized as EN 60674-3 (series)
ISO 1183-2:2019	NOTE	Harmonized as EN ISO 1183-2:2019 (not modified)
ISO 11357-3:2018	NOTE	Harmonized as EN ISO 11357-3:2018 (not modified)

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Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 1 Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

Publication	Year	Title	EN/HD	Year
IEC 60674-1	1980	Specification for plastic films for electrical purposes. Part 1: Definitions and general requirements	EN 60674-1	1998
IEC 60674-2	2016	Specification for plastic films for electrical purposes - Part 2: Methods of test	EN 60674-2	2017
IEC 60757	-	Code for designation of colours	EN IEC 60757	-
ISO 9773	-	Plastics - Determination of burning behaviour of thin flexible vertical specimens in contact with a small-flame ignition source	EN ISO 9773	-

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IEC 60674-3-4

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INTERNATIONAL STANDARD

NORME INTERNATIONALE

Plastic films for electrical purposes – Part 3: Specifications for individual materials – Sheet 4: Polyimide films used for electrical insulation

Films plastiques à usages électriques – Partie 3: Spécifications pour matériaux particuliers – Feuille 4: Films de polyimide utilisés dans l'isolation électrique

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PLASTIC FILMS FOR ELECTRICAL PURPOSES –

Part 3: Specifications for individual materials – Sheet 4: Polyimide films used for electrical insulation

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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IEC 60674-3-4 has been prepared by IEC technical committee 15: Solid electrical insulating materials. It is an International Standard.

This second edition cancels and replaces the first edition published in 1993. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

a) this document has been completely revised editorially and technically and included in the IEC 60674 series of standards;
b) new types have been included;
c) the ranges of thickness have been expanded;
d) changes have been made to the requirements of some existing types.

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The text of this International Standard is based on the following documents:

Draft	Report on voting
15/956/CDV	15/971/RVC

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

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/publications.

A list of all parts in the IEC 60674 series, published under the general title *Plastic films for electrical purposes*, can be found on the IEC website.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under webstore.iec.ch in the data related to the specific document. At this date, the document will be

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

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INTRODUCTION

This document is one of a series which deals with plastic films for electrical purposes. The series will consist of three parts:

Part 1: Definitions and general requirements (IEC 60674-1);

Part 2: Methods of test (IEC 60674-2);

Part 3: Specifications for individual materials.

This document contains one of the sheets comprising Part 3, as follows:

Sheet 4: Polyimide films used for electrical insulation

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PLASTIC FILMS FOR ELECTRICAL PURPOSES –

Part 3: Specifications for individual materials – Sheet 4: Polyimide films used for electrical insulation

1 Scope

This sheet of IEC 60674-3 gives the requirements for polyimide films used for electrical purposes.

Materials which conform to this specification meet established levels of performance. However, the selection of a material by a user for a specific application is 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 documents are referred to in the text in such a way that some or all of their content constitutes requirements 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.

IEC 60674-1:1980, *Specification for plastic films for electrical purposes – Part 1: Definitions and general requirements*

IEC 60674-2:2016, *Specification for plastic films for electrical purposes – Part 2: Methods of test*

IEC 60757, *Code for designation of colours*

ISO 9773, *Plastics – Determination of burning behaviour of thin flexible vertical specimens in contact with a small-flame ignition source*

3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- IEC Electropedia: available at https://www.electropedia.org/
- ISO Online browsing platform: available at https://www.iso.org/obp

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