

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**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**

**Spécification pour les films en matière plastique à usages électriques –
Partie 3: Spécifications pour matériaux particuliers Feuille 2: Exigences pour les
films de polyéthylène-téréphtalate (PET), à orientation biaxe équilibrée, utilisés
dans l'isolation électrique**



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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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**

FOREWORD

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International Standard IEC 60674-3-2 has been prepared by IEC technical committee 15: Solid electrical insulating materials.

This second edition cancels and replaces the first edition published in 1992. 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.

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

CDV	Report on voting
15/840/CDV	15/865/RVC

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

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

A list of all parts in the IEC 60674 series, published under the general title *Specification for 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 "<http://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- withdrawn,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.

INTRODUCTION

This standard is one of a series which deals with plastic films for electrical purposes.

The series 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* (IEC 60674-3)

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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

1 Scope

This sheet of IEC 60674-3 gives the requirements for balanced biaxially oriented polyethylene terephthalate (PET) films used for electrical insulation.

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 60068-2-67, *Environmental testing – Part 2-67: Tests – Test Cy: Damp heat, steady state, accelerated test primarily intended for components*

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 60674-2/AMD1:–1

3 Terms and definitions

No terms and definitions are listed in this document.

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

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

4 Classification

The PET film shall be of the following types:

- Type 1: Standard
- Type 2: Ultra thin with high electric strength
- Type 3: High temperature resistance
- Type 4: High temperature and hydrolysis resistance
- Type 5: High temperature and hydrolysis resistance higher than type 4

Main applications of each type are as follows:

¹ Under preparation. Stage at the time of publication: IEC/APUB 60674-2/AMD1:2018.