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Third edition
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Plastics — Determination of burning behaviour of thin flexible vertical specimens in contact with a small flame ignition source

Plastiques — Détermination du comportement au feu d'éprouvettes minces verticales souples au contact d'une petite flamme comme source d'allumage

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Contents

Page

Foreword

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The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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This document was prepared by Technical Committee ISO/TC 61, *Plastics*, Subcommittee SC 4, *Burning behaviour*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 249, *Plastics*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This third edition cancels and replaces the second edition (ISO 9773:1998), which has been technically revised. It also incorporates the Amendment ISO 9773:1998/Amd. 1:2003.

The main changes are as follows:

— the required light level in the chamber has been added;

— informations on conditioning, laboratory and timing have been amended;

— conditioning of cotton prior to testing has been added;

— information on specimen thickness has been amended;

— information on retesting has been amended;

— mandatory information is provided throughout the document;

— normative references clause has been updated.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Plastics — Determination of burning behaviour of thin flexible vertical specimens in contact with a small flame ignition source

1 Scope

1.1 This document specifies a small-scale laboratory screening procedure for comparing the relative burning behaviour of vertically oriented thin and relatively flexible plastics specimens exposed to a low-energy-level flame ignition source.

NOTE These specimens cannot be tested using method B of IEC 60695-11-10:2013 since they distort or shrink away from the applied flame source without igniting.

1.2 This test method determines the afterflame and afterglow times of specimens.

1.3 The classification system described in Annex A is intended for quality control and the preselection of component materials for products. The classification established by this method of test is applicable only to the material used for the specimens.

NOTE Test results are influenced by material components, e.g. pigments, fillers, concentrations of fire retardants.

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.

ISO 845:2006, *Cellular plastics and rubbers — Determination of apparent density*

ISO 10093:2020, *Plastics — Fire tests — Standard ignition sources*

ISO 13943:2023, *Fire safety — Vocabulary*

IEC 60695-11-4:2011, *Fire hazard testing — Part 11-4: Test flames — 50 W flame — Apparatus and confirmational test method*

IEC 60695-11-5:2016, *Fire hazard testing — Part 11-5: Test flames — Needle-flame test method — Apparatus, confirmatory test arrangement and guidance*

IEC 69695-11-10:2013, *Fire hazard testing — Part 11-10: Test flames — 50 W horizontal and vertical flame test methods*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 13943 and the following apply.

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

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at https://www.electropedia.org/