

Irish Standard I.S. EN ISO 15791-1:2013

Plastics - Development and use of intermediate-scale fire tests for plastics products - Part 1: General guidance (ISO 15791-1:2014)

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Plastics - Development and use of intermediate-scale fire tests for plastics products - Part 1: General guidance (ISO 15791-1:2014)

Plastiques - Développement et utilisation des essais au feu à une échelle intermédiaire pour les produits plastiques -Partie 1: Lignes directrices générales (ISO 15791-1:2014) Kunststoffe - Entwicklung und Anwendung von Brandprüfungen im mittleren Maßstab für Kunststofferzeugnisse - Teil 1: Allgemeine Anleitung (ISO 15791-1:2014)

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Foreword

This document (EN ISO 15791-1:2013) has been prepared by Technical Committee ISO/TC 61 "Plastics" in collaboration with Technical Committee CEN/TC 249 "Plastics" the secretariat of which is held by NBN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by June 2014, and conflicting national standards shall be withdrawn at the latest by June 2014.

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

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INTERNATIONAL STANDARD

ISO 15791-1

Second edition 2014-01-15

Plastics — Development and use of intermediate-scale fire tests for plastics products —

Part 1: General guidance

Plastiques — Développement et utilisation des essais au feu à une échelle intermédiaire pour les produits plastiques —

Partie 1: Lignes directrices générales



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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

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 documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2. www.iso.org/directives

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The committee responsible for this document is ISO/TC 61, *Plastics*, Subcommittee SC 4, *Burning behaviour*.

This second edition cancels and replaces the first edition (ISO 15791-1:2002), which has been technically revised.

ISO 15791 consists of the following parts, under the general title *Plastics* — *Development and use of intermediate-scale fire tests for plastics products*:

— Part 1: General guidance

Guidance on product fire testing for semi-finished and finished products is to form the subject of a future part 2.

Introduction

Products for many applications are made of or contain substantial proportions of plastics. The fire performance of a product depends on the materials from which it is made, the design of the product and its environment.

Industry needs to test products used for different applications for regulatory, quality control, development and pre-selection purposes.

Numerous regulations and regional, state and local codes make reference to combustibility tests and standards, and ranking of products derived from these tests are the most commonly available means of comparing the various combustion characteristics of products. More than one test and possibly intermediate- or full-scale tests may be necessary to qualify products containing plastics for intended or proposed use or representative product end-use conditions.

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Plastics — Development and use of intermediate-scale fire tests for plastics products —

Part 1: **General guidance**

1 Scope

This part of ISO 15791 provides a framework guide for the development and use of intermediate-scale fire tests for products made of or containing plastics.

The guidance identifies typical applications of plastics products and possible fire scenarios that can arise involving products in these applications. The development and use of intermediate-scale tests is described to ensure their relevance to the end use of the product.

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.

ISO 13943, Fire safety — Vocabulary

3 Terms and definitions

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

3.1

fire scenario

qualitative description of the course of a fire with respect to time, identifying key events that characterize the studied fire and differentiate it

[SOURCE: of ISO 13943:2008, definition 4.129, modified.]

3.2

intermediate-scale fire test

fire test performed on a test specimen of medium dimensions

[SOURCE: ISO 13943:2008, definition 4.200, modified — The note has been omitted.]

3.3

large-scale fire test

fire test that cannot be carried out in a typical laboratory chamber, performed on a test specimen of large dimensions

[SOURCE: ISO 13943:2008, definition 4.205, modified — The note has been omitted.]

3.4

product

manufactured article ready for end use



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