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Standards

Irish Standard  
I.S. EN ISO 13468-2:2021

# Plastics - Determination of the total luminous transmittance of transparent materials - Part 2: Double-beam instrument (ISO 13468-2:2021)

**I.S. EN ISO 13468-2:2021**

*Incorporating amendments/corrigenda/National Annexes issued since publication:*

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## National Foreword

I.S. EN ISO 13468-2:2021 is the adopted Irish version of the European Document EN ISO 13468-2:2021, Plastics - Determination of the total luminous transmittance of transparent materials - Part 2: Double-beam instrument (ISO 13468-2:2021)

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**EUROPEAN STANDARD**  
**NORME EUROPÉENNE**  
**EUROPÄISCHE NORM**

**EN ISO 13468-2**

June 2021

ICS 83.080.01

Supersedes EN ISO 13468-2:2006

English Version

**Plastics - Determination of the total luminous  
transmittance of transparent materials - Part 2: Double-  
beam instrument (ISO 13468-2:2021)**

Plastiques - Détermination du facteur de transmission  
du flux lumineux total des matériaux transparents -  
Partie 2: Instrument à double faisceau (ISO 13468-  
2:2021)

Kunststoffe - Bestimmung des totalen  
Lichttransmissionsgrades von transparenten  
Materialien - Teil 2: Zweistrahlinstrument (ISO 13468-  
2:2021)

This European Standard was approved by CEN on 23 May 2021.

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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 CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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**CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels**

**EN ISO 13468-2:2021 (E)**

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## **European foreword**

This document (EN ISO 13468-2:2021) 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of an identical text or by endorsement, at the latest by December 2021, and conflicting national standards shall be withdrawn at the latest by December 2021.

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

This document supersedes EN ISO 13468-2:2006.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

## **Endorsement notice**

The text of ISO 13468-2:2021 has been approved by CEN as EN ISO 13468-2:2021 without any modification.

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# INTERNATIONAL STANDARD

**ISO  
13468-2**

Second edition  
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## **Plastics — Determination of the total luminous transmittance of transparent materials —**

### **Part 2: Double-beam instrument**

*Plastiques — Détermination du facteur de transmission du flux  
lumineux total des matériaux transparents —*

*Partie 2: Instrument à double faisceau*



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## ISO 13468-2:2021(E)

### 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 (see [www.iso.org/directives](http://www.iso.org/directives)).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see [www.iso.org/patents](http://www.iso.org/patents)).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

This document was prepared by Technical Committee ISO/TC 61, *Plastics*, Subcommittee SC 5, *Physical-chemical properties*, 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 second edition cancels and replaces the first edition (ISO 13468-2:1999), of which it constitutes a minor revision.

The changes compared to the previous edition are as follows:

— the normative references have been updated.

A list of all parts in the ISO 13468 series can be found on the ISO website.

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](http://www.iso.org/members.html).

# Plastics — Determination of the total luminous transmittance of transparent materials —

## Part 2: Double-beam instrument

### 1 Scope

This document covers the determination of the total luminous transmittance, in the visible region of the spectrum, of planar transparent plastics and substantially colourless plastics, using a double-beam scanning spectrophotometer. This document cannot be used for plastics which contain fluorescent materials.

This document is applicable to transparent moulding materials, films and sheets not exceeding 10 mm in thickness.

NOTE 1 Total luminous transmittance can also be determined by a single-beam instrument as in ISO 13468-1.

NOTE 2 Substantially colourless plastics include those which are faintly tinted.

NOTE 3 Specimens more than 10 mm thick can be measured provided the instrument can accommodate them, but the results cannot be comparable with those obtained using specimens less than 10 mm thick.

### 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 291, *Plastics — Standard atmospheres for conditioning and testing*

CIE PUBLICATION No 15, *Colorimetry*

CIE PUBLICATION No <sup>1)</sup> 17, *International lighting vocabulary*

### 3 Terms and definitions

For the purposes of this document, the terms and definitions given in CIE Publication No. 17 and the following apply.

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

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

1) Also published as IEC 60050-845, *International Electrotechnical Vocabulary (IEV) International electrotechnical vocabulary — Chapter 845: Lighting*.

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