



**NSAI**  
Standards

Irish Standard  
I.S. EN ISO 21545:2020

# Paints and varnishes - Determination of settling (ISO 21545:2018)

**I.S. EN ISO 21545:2020**

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

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## National Foreword

I.S. EN ISO 21545:2020 is the adopted Irish version of the European Document EN ISO 21545:2020, Paints and varnishes - Determination of settling (ISO 21545:2018)

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EUROPEAN STANDARD

EN ISO 21545

NORME EUROPÉENNE

EUROPÄISCHE NORM

December 2020

ICS 87.040

English Version

## Paints and varnishes - Determination of settling (ISO 21545:2018)

Peintures et vernis - Détermination de la  
sédimentation (ISO 21545:2018)

Beschichtungsstoffe - Bestimmung des  
Absetzverhaltens (ISO 21545:2018)

This European Standard was approved by CEN on 30 November 2020.

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**EN ISO 21545:2020 (E)**

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## **European foreword**

The text of ISO 21545:2018 has been prepared by Technical Committee ISO/TC 35 "Paints and varnishes" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 21545:2020 by Technical Committee CEN/TC 139 "Paints and varnishes" the secretariat of which is held by DIN.

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of an identical text or by endorsement, at the latest by June 2021, and conflicting national standards shall be withdrawn at the latest by June 2021.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.

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## **Endorsement notice**

The text of ISO 21545:2018 has been approved by CEN as EN ISO 21545:2020 without any modification.

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# INTERNATIONAL STANDARD

**ISO  
21545**

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## **Paints and varnishes — Determination of settling**

*Peintures et vernis — Détermination de la sédimentation*



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ISO 21545:2018(E)

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**ISO 21545:2018(E)**



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## ISO 21545:2018(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 35, *Paints and varnishes*, Subcommittee SC 9, *General test methods for paints and varnishes*.

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).

## **Introduction**

This document uses a glass cylinder and the height of settling is read after an agreed time, usually a short interval of some hours or days.

An alternative method for determining the settling of coating materials is given in ASTM D869<sup>[1]</sup>.

The method described in ASTM D869 uses a metal can and the settling of the paint is determined after 6 months of storage time. Then the settling is reincorporated by stirring and the result is rated using a 0 to 10 scale. That method is more like a shelf-life test.



# Paints and varnishes — Determination of settling

## 1 Scope

This document specifies a method for determining the settling of coating materials. It is used to determine short-time settling, e.g. during transport or in an electro-deposition bath.

## 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 1513, *Paints and varnishes — Examination and preparation of test samples*

ISO 4618:2014, *Paints and varnishes — Terms and definitions*

ISO 4788, *Laboratory glassware — Graduated measuring cylinders*

ISO 15528, *Paints, varnishes and raw materials for paints and varnishes — Sampling*

## 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 4618 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/>

### 3.1

#### **settling**

deposition of a sediment on the bottom of a can of a coating material

Note 1 to entry: A compact sediment cannot be redispersed by simple stirring.

[SOURCE: ISO 4618:2014, 2.227]

## 4 Principle

The coating material rests in a measuring cylinder at a specified temperature and for a specified period of time, so that solids can settle. The height of the sediment on the bottom is measured at specified time intervals.

## 5 Apparatus

Ordinary laboratory apparatus and glassware, together with the following.

### 5.1 Laboratory stirrer.

**5.2 100 ml measuring cylinder** with a graduation of 1 ml or **250 ml measuring cylinder** with a graduation of 2 ml, accuracy class B, in accordance with ISO 4788.

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