



NSAI
Standards

Irish Standard
I.S. EN 16074:2019

Paints and varnishes - Determination of non-volatile-matter content and spreading rate of coil coating materials

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I.S. EN 16074:2019

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National Foreword

I.S. EN 16074:2019 is the adopted Irish version of the European Document EN 16074:2019, Paints and varnishes - Determination of non-volatile-matter content and spreading rate of coil coating materials

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EUROPEAN STANDARD

EN 16074

NORME EUROPÉENNE

EUROPÄISCHE NORM

September 2019

ICS 87.040

Supersedes EN 16074:2011

English Version

Paints and varnishes - Determination of non-volatile-matter content and spreading rate of coil coating materials

Peintures et vernis - Détermination de la teneur en matière non volatile et du rendement superficiel spécifique de revêtements pour prélaquage

Beschichtungsstoffe - Bestimmung des Gehaltes an nichtflüchtigen Anteilen und der Ergiebigkeit von Bandbeschichtungsstoffen

This European Standard was approved by CEN on 1 July 2019.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

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.

CEN members are the national standards bodies of 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 United Kingdom.



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European foreword

This document (EN 16074:2019) has been prepared 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 March 2020, and conflicting national standards shall be withdrawn at the latest by March 2020.

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 16074:2011.

The main changes compared to EN 16074:2011 are:

- a) the symbols have been aligned with current standards [ISO 3251 and ISO 3233 (all parts)], i.e. m for mass, s for spreading rate, NV for non-volatile matter and ρ for density;
- b) Clause 8 on "Determination of the density" has been added;
- c) the text has been editorially revised and the normative references have been updated.

According to the CEN-CENELEC Internal Regulations, the national standards organisations 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.

EN 16074:2019 (E)**1 Scope**

The method specifies the gravimetric procedure for determining the non-volatile-matter content as a percentage by mass of the majority of thermally cured coil coatings and subsequently for determining the theoretical spreading rate. The method is not suitable for pure epoxy coil coatings.

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.

EN 13523-0, *Coil coated metals — Test methods — Part 0: General introduction*

EN ISO 1513, *Paints and varnishes — Examination and preparation of test samples (ISO 1513)*

EN ISO 2811-1, *Paints and varnishes — Determination of density — Part 1: Pycnometer method (ISO 2811-1)*

EN ISO 2811-2, *Paints and varnishes — Determination of density — Part 2: Immersed body (plummet) method (ISO 2811-2)*

EN ISO 2811-3, *Paints and varnishes — Determination of density — Part 3: Oscillation method (ISO 2811-3)*

EN ISO 2811-4, *Paints and varnishes — Determination of density — Part 4: Pressure cup method (ISO 2811-4)*

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

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 13523-0 and the following apply.

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>

3.1 spreading rate

surface area that can be covered by a given quantity of coating material to give a dried film of requisite thickness

Note 1 to entry: It is expressed in m²/l or m²/kg.

Note 2 to entry: See also theoretical spreading rate.

[SOURCE: EN ISO 4618:2014, 2.238, modified – Application rate and practical spreading rate were deleted in Note 2.]

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