ICS 01.040.87 SLOVENSKÁ TECHNICKÁ NORMA Júl 2020

STN	**Náterové látky Zmáčavosť Časť 5: Stanovenie polárnych a disperzných podielov povrchového napätia kvapalín z meraní kontaktných uhlov na tuhej látke iba s disperznou časťou jej povrchovej energie (ISO 19403-5: 2017)**	**STN EN ISO 19403-5** 67 2016

Paints and varnishes - Wettability - Part 5: Determination of the polar and dispersive fractions of the surface tension of liquids from contact angles measurements on a solid with only a disperse contribution to its surface energy (ISO 19403-5:2017)

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 06/20

Obsahuje: EN ISO 19403-5:2020, ISO 19403-5:2017

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN ISO 19403-5

February 2020

ICS 01.040.87

English Version

Paints and varnishes - Wettability - Part 5: Determination of the polar and dispersive fractions of the surface tension of liquids from contact angles measurements on a solid with only a disperse contribution to its surface energy (ISO 19403-5:2017)

Peintures et vernis - Mouillabilité - Partie 5: Détermination des fractions polaires er disperses de la tension superficielle des liquides à partir de l'angle de contact avec un solide n'ayant qu'une contribution de dispersion à son énergie de surface (ISO 19403-5:2017)

Beschichtungsstoffe - Benetzbarkeit - Teil 5: Bestimmung des polaren und dispersen Anteils der Oberflächenspannung von Flüssigkeiten aus Kontaktwinkelmessungen auf einem Festkörper mit rein dispersem Anteil der Oberflächenenergie (ISO 19403-5:2017)

This European Standard was approved by CEN on 4 November 2019.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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

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European foreword

The text of ISO 19403-5:2017 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 19403-5:2020 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 August 2020, and conflicting national standards shall be withdrawn at the latest by August 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.

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Endorsement notice

The text of ISO 19403-5:2017 has been approved by CEN as EN ISO 19403-5:2020 without any modification.

INTERNATIONAL STANDARD

ISO 19403-5

First edition
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Paints and varnishes — Wettability —

Part 5: Determination of the polar and dispersive fractions of the surface tension of liquids from contact angles measurements on a solid with only a disperse contribution to its surface energy

Peintures et vernis — Mouillabilité —

Partie 5: Détermination des fractions polaires er disperses de la tension superficielle des liquides à partir de l'angle de contact avec un solide n'ayant qu'une contribution de dispersion à son énergie de surface

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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 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).

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For an explanation on 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 the following URL: 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*.

A list of all parts in the ISO 19403 series can be found on the ISO website.

Paints and varnishes — Wettability —

Part 5: Determination of the polar and dispersive fractions of the surface tension of liquids from contact angles measurements on a solid with only a disperse contribution to its surface energy

1 Scope

This document specifies a test method to determine the polar and dispersive fractions of the surface tension of liquids by optical methods. The method can be applied for the characterization of liquid coating materials.

The applicability can be restricted for liquids with non-Newtonian rheology[1)].

This document assumes that the information of surface tension of the liquid to be tested and the surface free energy of the dispersive reference solids is known.

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 1409, *Plastics/rubber — Polymer dispersions and rubber latices (natural and synthetic) — Determination of surface tension by the ring method*

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

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

ISO 19403-1, *Paints and varnishes — Wettability — Part 1: Terminology and general principles*

ISO 19403-2:2017, *Paints and varnishes — Wettability — Part 2: Determination of the surface free energy of solid surfaces by measuring the contact angle*

ISO 19403-3, *Paints and varnishes — Wettability — Part 3: Determination of the surface tension of liquids using the pendant drop method*

EN 14370, *Surface active agents — Determination of surface tension*