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Paints and varnishes - Determination of the resistance to rubbing using a linear abrasion tester (crockmeter) (ISO 21546:2019)

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

See Eesti standard EVS-EN ISO 21546:2020 sisaldab Euroopa standardi EN ISO 21546:2020 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 21546:2020 consists of the English text of the European standard EN ISO 21546:2020.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 09.12.2020.	Date of Availability of the European standard is 09.12.2020.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

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ICS 87.040

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English Version

## Paints and varnishes - Determination of the resistance to rubbing using a linear abrasion tester (crockmeter) (ISO 21546:2019)

Peintures et vernis - Détermination de la résistance à la rayure avec un abrasimètre linéaire (ISO 21546:2019)

Beschichtungsstoffe - Bestimmung des Widerstandes gegen Verkratzen mit einem Linearhubgerät (Crockmeter) (ISO 21546:2019)

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

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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**

## European foreword

The text of ISO 21546:2019 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 21546:2020 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 21546:2019 has been approved by CEN as EN ISO 21546:2020 without any modification.

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

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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).

# Paints and varnishes — Determination of the resistance to rubbing using a linear abrasion tester (crockmeter)

## 1 Scope

This document specifies a method for determining the resistance of a coating to rubbing by means of a loaded abrasive material which is linearly moved over the surface to be tested.

The method can also be applied to different material surfaces, such as plastics and metals.

## 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 105-F09, *Textiles — Tests for colour fastness — Part F09: Specification for cotton rubbing cloth*

ISO 845, *Cellular plastics and rubbers — Determination of apparent density*

ISO 1514, *Paints and varnishes — Standard panels for testing*

ISO 2808, *Paints and varnishes — Determination of film thickness*

ISO 3270, *Paints and varnishes and their raw materials — Temperatures and humidities for conditioning and testing*

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

ISO 23321, *Solvents for paints and varnishes — Demineralized water for industrial applications — Specification and test methods<sup>1)</sup>*

ASTM D2240, *Standard Test Method for Rubber Property — Durometer Hardness*

FEPA-Standard 43-2<sup>2)</sup>, *Grains of fused aluminium oxide, silicon carbide and other abrasive materials for coated abrasives microgrits P 240 to P 2500*

## 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 4618 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) Under preparation. Stage at the time of publication: ISO/FDIS 23321:2019.

2) Federation of European Producers of Abrasives (FEPA). Reference source for FEPA standards: Staatliche Materialprüfungsanstalt Darmstadt, Dr. Ing. P. Hof, Grafenstraße 2, 64283 Darmstadt, Germany, Tel.: +49-6151-16 65 82, Fax: +49-6151-16 60 46, E-Mail: hof@mpa-ifw.tu-darmstadt.de.