

Paints and varnishes - Evaluation of quantity and size of defects, and of intensity of uniform changes in appearance - Part 10: Assessment of degree of filiform corrosion (ISO 4628-10:2024)

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN ISO 4628-10:2024 sisaldab Euroopa standardi EN ISO 4628-10:2024 ingliskeelset teksti. Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas. Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 27.03.2024. Standard on kättesaadav Eesti Standardimis-ja Akrediteerimiskeskusest.	This Estonian standard EVS-EN ISO 4628-10:2024 consists of the English text of the European standard EN ISO 4628-10:2024. This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation. Date of Availability of the European standard is 27.03.2024. The standard is available from the Estonian Centre for Standardisation and Accreditation.
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English Version

Paints and varnishes - Evaluation of quantity and size of defects, and of intensity of uniform changes in appearance
- Part 10: Assessment of degree of filiform corrosion (ISO 4628-10:2024)

Peintures et vernis - Évaluation de la quantité et de la dimension des défauts, et de l'intensité des changements uniformes d'aspect - Partie 10: Évaluation du degré de corrosion filiforme (ISO 4628-10:2024)

Beschichtungsstoffe - Beurteilung der Menge und der Größe von Schäden und der Intensität von gleichmäßigen Veränderungen im Aussehen - Teil 10: Bewertung der Filiformkorrosion (ISO 4628-10:2024)

This European Standard was approved by CEN on 29 January 2024.

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

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European foreword

This document (EN ISO 4628-10:2024) has been prepared by Technical Committee ISO/TC 35 "Paints and varnishes" in collaboration with 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of an identical text or by endorsement, at the latest by September 2024, and conflicting national standards shall be withdrawn at the latest by September 2024.

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 4628-10:2016.

Any feedback and questions on this document should be directed to the users' national standards body/national committee. A complete listing of these bodies can be found on the CEN website.

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Endorsement notice

The text of ISO 4628-10:2024 has been approved by CEN as EN ISO 4628-10:2024 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 document 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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This document was prepared by Technical Committee ISO/TC 35, *Paints and varnishes*, Subcommittee SC 9, *General test methods for paints and varnishes*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 139, *Paints and varnishes*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This third edition cancels and replaces the second edition (ISO 4628-10:2016), which has been technically revised.

The main changes are as follows:

- the title has been shortened;
- the definition of filiform corrosion (3.1) has been aligned with ISO 4623-1:2018;
- the normative references have been updated.

A list of all parts in the ISO 4628 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.

Paints and varnishes — Evaluation of quantity and size of defects, and of intensity of uniform changes in appearance —

Part 10: Assessment of degree of filiform corrosion

1 Scope

This document specifies a method for assessing the amount of filiform corrosion developed from a scribed mark by measuring the length of the longest filament L and the most frequent length M of filaments.

Pictorial examples provided in [Annex A](#) of this document illustrate different ratings for the degree of filiform corrosion. A comparison of the test panels with the 12 pictures in [Annex A](#) does not supersede the obligatory numerical assessment (method 1 or 2).

ISO 4628-1 defines a system used for designating the quantity and size of defects and the intensity of uniform changes in appearance of coatings and outlines the general principles of the system. This system is intended to be used, in particular, for defects caused by ageing and weathering, and for uniform changes such as colour changes, for example yellowing.

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 13076, *Paints and varnishes — Lighting and procedure for visual assessments of coatings*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

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

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

3.1 filiform corrosion

type of corrosion proceeding under a coat of paint, varnish, or related product, in the form of threads, generally starting from bare edges or from local damage to the coating

Note 1 to entry: Usually the threads are irregular in length and direction of growth, but they can also be nearly parallel and of approximately equal length. They usually follow the extrusion direction and do not cross over one another. They shall be initiated by aggressive ions.

[SOURCE: ISO 4623-1:2018, 3.1, modified — "need to" changed to "shall".]