Paints and varnishes - Evaluation of degradation of coatings - Designation of quantity and size of defects, and of intensity of uniform changes in appearance - Part 10: Assessment of degree of filiform corrosion (ISO 4628-10:2016, **Corrected version 2016-06-01)**

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NATIONAL FOREWORD

See Eesti standard EVS-EN ISO 4628-10:2016 sisaldab Euroopa standardi EN ISO 4628-10:2016 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 4628-10:2016 consists of the English text of the European standard EN ISO 4628-10:2016.
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 10.02.2016.	Date of Availability of the European standard is 10.02.2016.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

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English Version

Paints and varnishes - Evaluation of degradation of coatings - Designation of quantity and size of defects, and of intensity of uniform changes in appearance - Part 10: Assessment of degree of filiform corrosion (ISO 4628-10:2016, Corrected version 2016-06-01)

Peintures et vernis - Évaluation de la dégradation des revêtements - Désignation de la quantité et des dimensions des défauts, et de l'intensité des changements uniformes d'aspect - Partie 10: Évaluation du degré de corrosion filiforme (ISO 4628-10:2016, Version corrigée 2016-06-01)

Beschichtungsstoffe - Beurteilung von Beschichtungsschäden - Bewertung der Menge und der Größe von Schäden und der Intensität von gleichmäßigen Veränderungen im Aussehen - Teil 10: Bewertung der Filiformkorrosion (ISO 4628-10:2016)

This European Standard was approved by CEN on 19 December 2015.

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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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Ref. No. EN ISO 4628-10:2016 E

European foreword

This document (EN ISO 4628-10:2016) 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 August 2016, and conflicting national standards shall be withdrawn at the latest by August 2016.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN ISO 4628-10:2003.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Endorsement notice

The text of ISO 4628-10:2016, Corrected version 2016-06-01 has been approved by CEN as EN ISO 4628-10:2016 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).

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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information

The committee responsible for this document is ISO/TC 35, *Paints and varnishes*, Subcommittee SC 9, *General test methods for paints and varnishes*.

This second edition cancels and replaces the first edition (ISO 4628-10:2003), which has been technically revised with the following changes:

a) a normative reference to ISO 13076 for illumination for the assessment has been added.

ISO 4628 consists of the following parts, under the general title *Paints and varnishes — Evaluation of degradation of coatings —Designation of quantity and size of defects, and of intensity of uniform changes in appearance*:

— *Part 1: General introduction and assessment of general defects*

— *Part 2: Assessment of degree of blistering*

— *Part 3: Assessment of degree of rusting*

— *Part 4: Assessment of degree of cracking*

— *Part 5: Assessment of degree of flaking*

— *Part 6: Assessment of degree of chalking by tape method*

— *Part 7: Assessment of chalking by velvet method*

— *Part 8: Assessment of degree of delamination and corrosion around a scribe or other artificial defect*

— *Part 10: Assessment of degree of filiform corrosion*

This corrected version of ISO 4628-10:2016 incorporates the following correction:

— in Figure A.1 b), the description has been corrected to read "b) *L*2/*M*2" instead of "b) *L*1/*M*2".

Paints and varnishes — Evaluation of degradation of coatings — Designation 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 part of ISO 4628 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 part of ISO 4628 illustrate different ratings for the length of the longest filament *L* and the most frequent length *M* of the filaments. 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, in whole or in part, are normatively referenced in this document and are indispensable for its application. 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.

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 of the coating

Note 1 to entry: Usually the threads are irregular in length and direction of growth, but they may also be nearly parallel and of approximately equal length.

Note 2 to entry: Filiform corrosion can also occur under other protective coatings.

Note 3 to entry: Usually the threads follow the direction of extrusion of a metal substrate, do not cross over one another, and need to be initiated by aggressive ions.

[SOURCE: ISO 4623-1:2000, 3.1, modified — Note 3 to entry has been added; ISO 4623-2:2003, 3.1, modified — The notes to entry have been numbered.]