

Paints and varnishes - Evaluation of degradation of coatings - Designation of quantity and size of defects, and of intensity of uniform changes in appearance - Part 7: Assessment of degree of chalking by velvet method (ISO 4628-7:2016)

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

See Eesti standard EVS-EN ISO 4628-7:2016 sisaldab Euroopa standardi EN ISO 4628-7:2016 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 4628-7:2016 consists of the English text of the European standard EN ISO 4628-7:2016.
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.
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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 7: Assessment of degree of chalking by velvet method (ISO 4628-7:2016)

Peintures et vernis - Évaluation de la dégradation des revêtements - Désignation de la quantité et de la dimension des défauts, et de l'intensité des changements uniformes d'aspect - Partie 7: Évaluation du degré de farinage selon la méthode du morceau de velours (ISO 4628-7:2016)

Beschichtungsstoffe - Beurteilung von Beschichtungsschäden - Bewertung der Menge und der Größe von Schäden und der Intensität von gleichmäßigen Veränderungen im Aussehen - Teil 7: Bewertung des Kreidungsgrades nach dem Samtverfahren (ISO 4628-7:2016)

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

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## European foreword

This document (EN ISO 4628-7:2016) 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of an identical text or by endorsement, at the latest by August 2016, and conflicting national standards shall be withdrawn at the latest by August 2016.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 4628-7:2003.

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 4628-7:2016 has been approved by CEN as EN ISO 4628-7:2016 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](http://www.iso.org/directives)).

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Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

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 method for paints and varnishes*.

This second edition cancels and replaces the first edition (ISO 4628-7:2003), which has been technically revised with the following changes:

- a) the pictorial reference standard for numerical chalking ratings 1 to 5 have been copied from ISO 4628-6:2011;
- b) 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 designation system*
- *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 degree 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*

# Paints and varnishes — Evaluation of degradation of coatings — Designation of quantity and size of defects, and of intensity of uniform changes in appearance —

## Part 7: Assessment of degree of chalking by velvet method

### 1 Scope

This part of ISO 4628 specifies a method suitable, in particular, for rating the degree of chalking on white or coloured exterior coatings and coating systems on rough surfaces (i.e. those having a roughness greater than segment 4 of the reference comparator G as described in ISO 8503-1).

The test method specified can also be used for the assessment of the degree of chalking of coatings and coating systems on smooth surfaces, but the method specified in ISO 4628-6:2011 is preferable for this purpose.

The test method is applicable to coatings and coating systems on mineral substrates, e.g. fibre cement, brick, concrete, and renderings, independent of the structure of the surface. The method can be used quite effectively by experienced operators and is recommended for laboratory use as well as for on-site evaluation.

NOTE 1 When a reference to this test method is included in specifications, the test conditions (i.e. weathering method and substrate) have to be agreed between the interested parties.

NOTE 2 The method described in this part of ISO 4628 is a relative ranking method and is therefore not suitable for use in agreements between parties. See, however, the Note to [Table 1](#).

NOTE 3 Refer to ISO 4628-1 for the designation system for quantity and size of defects and the intensity of changes in appearance of coatings, as well as general principles of the system.

### 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 chalking

appearance of a loosely adherent fine powder on the surface of a film arising from the degradation of one or more of its constituents

### 4 Principle

Loosely adherent powder is removed from the coating under test, using a suitable fabric. The degree of chalking is assessed with reference to a rating scale.