

**Paints and varnishes - Evaluation of properties of
coating systems related to the application process - Part
1: Relevant vocabulary and preparation of test panels**

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN ISO 28199-1:2010 sisaldab Euroopa standardi EN ISO 28199-1:2009 ingliskeelset teksti.

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ICS 87.040

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English Version

Paints and varnishes - Evaluation of properties of coating systems related to the application process - Part 1: Relevant vocabulary and preparation of test panels (ISO 28199-1:2009)

Peintures et vernis - Évaluation des propriétés des systèmes de revêtement liées au mode d'application - Partie 1: Vocabulaire pertinent et préparation des panneaux d'essai (ISO 28199-1:2009)

Beschichtungsstoffe - Beurteilung applikationsbedingter Eigenschaften von Beschichtungssystemen - Teil 1: Begriffe und Vorbereitung der Probenplatten (ISO 28199-1:2009)

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Foreword

This document (EN ISO 28199-1:2009) 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of an identical text or by endorsement, at the latest by March 2010, and conflicting national standards shall be withdrawn at the latest by March 2010.

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Endorsement notice

The text of ISO 28199-1:2009 has been approved by CEN as a EN ISO 28199-1:2009 without any modification.

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Introduction

In many areas (e.g. car manufacture, industrial coatings, coatings for plastics) the coating materials used are adapted to the specific application equipment and technologies of the particular user. A coating material is, therefore, to be understood as a semi-manufactured product that only receives its final form in combination with the specific application conditions. The adaptation to the application conditions is therefore decisive for the quality of the coated product.

The test methods specified in ISO 28199 are based on studies by a Working Group of the European Council for Automotive R&D (EUCAR).

They may be used for evaluation of coating materials in research, development and production with regard to their suitability and safety for industrial processes, and error analysis. The properties of coating materials and coatings to be evaluated depend on the film thickness, so a coating system of increasing thickness is applied to a test panel under defined conditions.

The following characteristics are measured (in this part of ISO 28199):

- film thickness in accordance with ISO 2808;
- surface texture;
- colour in accordance with ISO 7724 (all parts).

In combination with visual assessment, the following properties are determined:

- colour stability, process hiding power, re-dissolving, overspray absorption, wetting, surface texture and mottling (ISO 28199-2);
- tendency toward sagging, formation of bubbles, pinholing and hiding power (ISO 28199-3).

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Paints and varnishes — Evaluation of properties of coating systems related to the application process —

Part 1: Relevant vocabulary and preparation of test panels

1 Scope

This part of ISO 28199 defines terms relating to the evaluation of coating materials in research, development and production with regard to their suitability and safety for industrial processes and error analysis.

This part of ISO 28199 specifies methods for the preparation of test panels and the subsequent measurement of film thickness, colour and surface texture.

2 Normative references

The following referenced documents are indispensable for the application 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 1513, *Paints and varnishes — Examination and preparation of samples 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 7724-1, *Paints and varnishes — Colorimetry — Part 1: Principles*

ISO 7724-2, *Paints and varnishes — Colorimetry — Part 2: Colour measurement*

ISO 7724-3, *Paints and varnishes — Colorimetry — Part 3: Calculation of colour differences*

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

ISO 28199-2, *Paints and varnishes — Evaluation of properties of coating systems related to the application process — Part 2: Colour stability, process hiding power, re-dissolving, overspray absorption, wetting, surface texture and mottling*

ISO 28199-3, *Paints and varnishes — Evaluation of properties of coating systems related to the application process — Part 3: Visual assessment of sagging, formation of bubbles, pinholing and hiding power*