

**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**

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN ISO 28199-3:2010 sisaldab Euroopa standardi EN ISO 28199-3:2009 ingliskeelset teksti.

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English Version

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 (ISO 28199-3:2009)

Peintures et vernis - Évaluation des propriétés des systèmes de revêtement liées au mode d'application - Partie 3: Évaluation visuelle du festonnage, de la formation de bulles, des piqûres et du pouvoir masquant (ISO 28199-3:2009)

Beschichtungsstoffe - Beurteilung von applikationsbedingter Eigenschaften von Beschichtungssystemen - Teil 3: Visuelle Beurteilung von Ablaufneigung, Kocherbildung, Nadelstichbildung und Deckvermögen (ISO 28199-3:2009)

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
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Foreword

This document (EN ISO 28199-3:2009) 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of an identical text or by endorsement, at the latest by March 2010, and conflicting national standards shall be withdrawn at the latest by March 2010.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 28199-3:2009 has been approved by CEN as a EN ISO 28199-3:2009 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 ISO 28199-1):

- 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 (this part of ISO 28199).

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

IMPORTANT — The electronic file of this document contains colours which are considered to be useful for the correct understanding of the document. Users should therefore consider printing this document using a colour printer.

1 Scope

This part of ISO 28199 specifies visual methods for the assessment of tendency toward sagging, formation of bubbles, pinholing and hiding power of coating materials applied to a test panel under defined conditions.

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 6504-3, *Paints and varnishes — Determination of hiding power — Part 3: Determination of contrast ratio of light-coloured paints at a fixed spreading rate*

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

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 28199-1 apply.

4 Tendency toward sagging

4.1 General

The tendency toward sagging is determined by visual assessment of the sag. This assessment is made after drying/curing of the coating, on a panel prepared in accordance with Version A in ISO 28199-1:2009.

If a tendency toward sagging is already visible in the liquid layer, this should be marked at the edge of the panel.

Film thickness is determined using the values measured in accordance with 9.4.2 of ISO 28199-1:2009.