

Paints and varnishes - Determination of the scratch resistance of a coating system using a laboratory car-wash

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

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| <p>Käesolev Eesti standard EVS-EN ISO 20566:2006 sisaldab Euroopa standardi EN ISO 20566:2006 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 24.11.2006 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p> | <p>This Estonian standard EVS-EN ISO 20566:2006 consists of the English text of the European standard EN ISO 20566:2006.</p> <p>This document is endorsed on 24.11.2006 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p> |
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| <p>Käsitlusala:</p> <p>This International Standard describes a test procedure for assessing the scratch resistance of organic paint coatings¹⁾, in particular paint coatings used in the automotive industry (i.e. for assessing their car-wash resistance). Machine-based washing is simulated in the laboratory environment using a rotating brush and synthetic dirt.</p> | <p>Scope:</p> <p>This International Standard describes a test procedure for assessing the scratch resistance of organic paint coatings¹⁾, in particular paint coatings used in the automotive industry (i.e. for assessing their car-wash resistance). Machine-based washing is simulated in the laboratory environment using a rotating brush and synthetic dirt.</p> |
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ICS 43.020, 87.040

Võtmesõnad:

ICS 43.020; 87.040

English Version

Paints and varnishes - Determination of the scratch resistance
of a coating system using a laboratory car-wash (ISO
20566:2005)

Peintures et vernis - Détermination de la résistance à la
rayure d'un système de peinture sur un poste de lavage
automobile de laboratoire (ISO 20566:2005)

Beschichtungsstoffe - Prüfung der Kratzfestigkeit von
Beschichtungen mit einer Laborwaschanlage (ISO
20566:2005)

This European Standard was approved by CEN on 11 September 2006.

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Foreword

The text of ISO 20566:2005 has been prepared by Technical Committee ISO/TC 35 "Paints and varnishes" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 20566:2006 by 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 April 2007, and conflicting national standards shall be withdrawn at the latest by April 2007.

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Endorsement notice

The text of ISO 20566:2005 has been approved by CEN as EN ISO 20566:2006 without any modifications.

**Paints and varnishes — Determination
of the scratch resistance of a coating
system using a laboratory car-wash**

*Peintures et vernis — Détermination de la résistance à la rayure d'un
système de peinture sur un poste de lavage automobile de laboratoire*



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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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

ISO 20566 was prepared by Technical Committee ISO/TC 35, *Paints and varnishes*, Subcommittee SC 9, *General test methods for paints and varnishes*.

It is based on the German standard DIN 55668, *Beschichtungsstoffe — Prüfung der Kratzfestigkeit von Beschichtungen mit einer Laborwaschanlage* (*Paints and varnishes — Determination of scratch resistance of coating systems using a laboratory car wash*).

Introduction

With this test procedure, it is important to note that the test results will not, over time, remain constant, as a result of changes to the brush material. As the brush ages, the test will become more severe. As a result, the test procedure is suitable only for comparative tests carried out at any one time and using relatively short runs. Readings obtained using equipment which has accumulated different total numbers of operating hours are not comparable with each other.

Paints and varnishes — Determination of the scratch resistance of a coating system using a laboratory car-wash

1 Scope

This International Standard describes a test procedure for assessing the scratch resistance of organic paint coatings¹⁾, in particular paint coatings used in the automotive industry (i.e. for assessing their car-wash resistance). Machine-based washing is simulated in the laboratory environment using a rotating brush and synthetic dirt. The test conditions have been designed to be as close as possible to the real conditions in a car-wash.

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 2813, *Paints and varnishes — Determination of specular gloss of non-metallic paint films at 20°, 60° and 85°*

ISO 4618-1:1998, *Paints and varnishes — Terms and definitions for coating materials — Part 1: General terms*

ISO 13803, *Paints and varnishes — Determination of reflection haze on paint films at 20°*

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

3 Apparatus

The apparatus²⁾ shall comprise the following individual components:

3.1 Washing brush:

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|----------|-------------------|
| Diameter | 1 000 mm |
| Width | 400 mm |
| Material | polyethylene |
| Profile | x-shaped, spliced |

1) For the term “coating”, see ISO 4618-1:1998.

2) Information on procuring the equipment is available from DIN Deutsches Institut für Normung e.V., NAB, Burggrafenstrasse 6, 10787 Berlin, Germany.