Paints and varnishes - Rapid-deformation (impact resistance) tests - Part 2: Falling-weight test, small-area indenter (ISO 6272-2:2011)

EESTI STANDARDIKESKUS
ESTONIAN CENTRE FOR STANDARDISATION

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN ISO 6272-2:2011 sisaldab Euroopa standardi EN ISO 6272-2:2011 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 6272-2:2011 consists of the English text of the European standard EN ISO 6272-2:2011.
Standard on kinnitatud Eesti Standardikeskuse 31.08.2011 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.	This standard is ratified with the order of Estonian Centre for Standardisation dated 31.08.2011 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.
Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 15.08.2011.	Date of Availability of the European standard text 15.08.2011.
Standard on kättesaadav Eesti standardiorganisatsioonist.	The standard is available from Estonian standardisation organisation.

ICS 87.040

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN ISO 6272-2

August 2011

ICS 87.040

Supersedes EN ISO 6272-2:2006

English Version

Paints and varnishes - Rapid-deformation (impact resistance) tests - Part 2: Falling-weight test, small-area indenter (ISO 6272-2:2011)

Peintures et vernis - Essais de déformation rapide (résistance au choc) - Partie 2: Essai de chute d'une masse avec pénétrateur de surface réduite (ISO 6272-2:2011)

Beschichtungsstoffe - Prüfung der Widerstandsfähigkeit bei schlagartiger Verformung (Schlagfestigkeit) - Teil 2: Prüfung durch fallendes Gewichtsstück, kleine Prüffläche (ISO 6272-2:2011)

This European Standard was approved by CEN on 13 August 2011.

EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: Avenue Marnix 17, B-1000 Brussels

Ref. No. EN ISO 6272-2:2011: E

Foreword

This document (EN ISO 6272-2:2011) 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 February 2012, and conflicting national standards shall be withdrawn at the latest by February 2012.

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 6272-2:2006.

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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

Endorsement notice

The text of ISO 6272-2:2011 has been approved by CEN as a EN ISO 6272-2:2011 without any modification.

Contents

Page

Paints and varnishes — Rapid-deformation (impact resistance) tests —

Part 2: Falling-weight test, small-area indenter

1 Scope

This part of ISO 6272 describes a method for evaluating the resistance of a dry film of paint, varnish or related product to cracking or peeling from a substrate when it is subjected to a deformation caused by a falling weight, dropped under standard conditions, acting on a small-area spherical indenter.

NOTE The terms “impact” and “impact resistance” are used in the title and text of this part of ISO 6272, but an important characteristic of the apparatus used is that it should produce rapid deformation rather than a true impact.

Because of the poor reproducibility of this test method, the method should be restricted to testing in only one laboratory when the results are expressed as numerical values. Interlaboratory agreement is improved when ranking is used in place of numerical values.

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 test samples*

ISO 1514, *Paints and varnishes — Standard panels 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 13076, *Paints and varnishes — Lighting and procedure for visual assessments*

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

3 Principle

The coating under test is applied to suitable thin metal panels. After the coatings have cured, a standard weight is dropped a distance so as to strike an indenter that deforms the coating and the substrate. The test can be carried out with the coated side of the panel facing upwards (i.e. towards the falling weight and indentor) or downwards (i.e. away from the weight and indentor). By gradually increasing the distance the weight drops, the point at which failure occurs can be determined. Films generally fail by cracking, which is made more visible by the use of a magnifier or, on steel, by the application of a copper sulfate solution.