

Paints and varnishes - Rapid-deformation (impact resistance) tests - Part 1: Falling-weight test, large-area indenter (ISO 6272- 1:2011)

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN ISO 6272-1:2011 sisaldab Euroopa standardi EN ISO 6272-1:2011 ingliskeelset teksti.

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English Version

**Paints and varnishes - Rapid-deformation (impact resistance)
tests - Part 1: Falling-weight test, large-area indenter (ISO 6272-
1:2011)**

Peintures et vernis - Essais de déformation rapide
(résistance au choc) - Partie 1: Essai de chute d'une masse
avec pénétrateur de surface importante (ISO 6272-1:2011)

Beschichtungsstoffe - Prüfung der Widerstandsfähigkeit bei
schlagartiger Verformung (Schlagfestigkeit) - Teil 1:
Prüfung durch fallendes Gewichtsstück, große Prüffläche
(ISO 6272-1:2011)

This European Standard was approved by CEN on 22 July 2011.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
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Foreword

This document (EN ISO 6272-1:2011) 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of an identical text or by endorsement, at the latest by February 2012, and conflicting national standards shall be withdrawn at the latest by February 2012.

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Endorsement notice

The text of ISO 6272-1:2011 has been approved by CEN as a EN ISO 6272-1:2011 without any modification.

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

Part 1: Falling-weight test, large-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, with a 20-mm-diameter spherical indenter, dropped under standard conditions.

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.

The method described can be applied

- either as a pass/fail test, the test being carried out from one drop height and with a specified mass, so as to test compliance with a particular specification;
- or as a classification test, to determine, by gradually increasing the drop height and/or the mass, the minimum mass and/or drop height for which the coating cracks or peels from its substrate.

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 (normally metal) panels. After the coating has cured, a standard weight is dropped on to each panel from a height that will cause deformation of 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