



SLOVENSKI STANDARD
SIST EN ISO 1520:1997
01-december-1997

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Paints and varnishes - Cupping test (ISO 1520:1973)

Lacke und Anstrichstoffe - Tiefungsprüfung (ISO 1520:1973)

Peintures et vernis - Essai d'emboutissage (ISO 1520:1973)

Ta slovenski standard je istoveten z: EN ISO 1520:1995

[SIST EN ISO 1520:1997](https://standards.iteh.ai/catalog/standards/sist/cee484dc-fca5-4f65-8765-d41e4ff6eac3/sist-en-iso-1520-1997)

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ICS:

87.040 Barve in laki Paints and varnishes

SIST EN ISO 1520:1997 **en**

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EUROPEAN STANDARD

EN ISO 1520

NORME EUROPÉENNE

EUROPÄISCHE NORM

March 1995

ICS 87.040

Descriptors: paints, varnishes, tests, ductibility tests

English version

**Paints and varnishes - Cupping test
(ISO 1520:1973)**

Peintures et vernis - Essai d'emboutissage
(ISO 1520:1973)

Lacke und Anstrichstoffe - Tiefungsprüfung
(ISO 1520:1973)

(standard.teh.ai)



REPUBLIKA SLOVENIJA
MINISTRSTVO ZA ZNANOST IN TEHNOLOGIJO
Urad RS za standardizacijo in meroslovje
LJUBLJANA

SIST. EN ISO 1520

PREVZET PO METODI RAZGLASITVE

-12- 1997

This European Standard was approved by CEN on 1995-01-05. CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

The European Standards exist in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

Central Secretariat: rue de Stassart, 36 B-1050 Brussels

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Ref. No. EN ISO 1520:1995 E

Foreword

This European Standard has been taken over by the Technical Committee CEN/TC 139 "Paints and varnishes" from the work of ISO/TC 35 "Paints and varnishes" of the International Organization for Standardization (ISO).

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 September 1995, and conflicting national standards shall be withdrawn at the latest by September 1995.

According to the CEN/CENELEC Internal Regulations, the following countries are bound to implement this European Standard: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom.

Endorsement notice

The text of the International Standard ISO 1520:1973 was approved by CEN as a European Standard without any modification.

NOTE: Normative references to international publications are listed in annex ZA (normative)

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Annex ZA (normative)**Normative references to international publications
with their relevant European publications**

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN</u>	<u>Year</u>
ISO 1512	1991	Paints and varnishes - Sampling of products in liquid or paste form	EN 21512	1994
ISO 1513	1991	Paints and varnishes - Examination and preparation of samples for testing	EN ISO 1513	1994
ISO 1514	1984	Paints and varnishes - Standard panels for testing (Modified)	EN 605	1992

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INTERNATIONAL STANDARD



1520

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION • МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ • ORGANISATION INTERNATIONALE DE NORMALISATION

Paints and varnishes — Cupping test

First edition — 1973-12-15

iTeh STANDARD PREVIEW
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[SIST EN ISO 1520:1997](https://standards.iteh.ai/catalog/standards/sist/cee484dc-fca5-4f65-8765-d41e4ff6eac3/sist-en-iso-1520-1997)

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UDC 667.61 : 620.178.15

Ref. No. : ISO 1520-1973 (E)

Descriptors : paints, varnishes, tests, ductility tests.

Price based on 3 pages

FOREWORD

ISO (the International Organization for Standardization) is a worldwide federation of national standards institutes (ISO Member Bodies). The work of developing International Standards is carried out through ISO Technical Committees. Every Member Body interested in a subject for which a Technical Committee has been set up 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.

Draft International Standards adopted by the Technical Committees are circulated to the Member Bodies for approval before their acceptance as International Standards by the ISO Council.

Prior to 1972, the results of the work of the Technical Committees were published as ISO Recommendations; these documents are now in the process of being transformed into International Standards. As part of this process, International Standard ISO 1520 replaces ISO Recommendation R 1520-1970 drawn up by Technical Committee ISO/TC 35, *Paints and varnishes*.

[SIST EN ISO 1520:1997](https://standards.iteh.ai/catalog/standards/sist/cee484dc-fca5-4f65-8765-d41e4ff6eac3/sist-en-iso-1520-1997)

The Member Bodies of the following countries approved the Recommendation :

Australia	Iran	Spain
Austria	Ireland	Sweden
Denmark	Israel	Switzerland
Egypt. Arab. Rep. of	Italy	Turkey
France	Peru	United Kingdom
Germany	Poland	U.S.S.R.
Greece	Portugal	
India	South Africa, Rep. of	

The Member Body of the following country expressed disapproval of the Recommendation on technical grounds :

Netherlands

Paints and varnishes – Cupping test

0 INTRODUCTION

This International Standard is one of a series dealing with the sampling and testing of paints, varnishes and related products. It should be read in conjunction with ISO 1512, ISO 1513 and ISO 1514.

This International Standard is one of three which specify empirical test procedures for assessing the resistance of coatings of paints, varnishes and related products to cracking and/or detachment from the substrate under different conditions of deformation. The other two of these documents are ISO 1519, *Paints and varnishes – Bend test (cylindrical mandrel)*, and ISO ...,¹⁾ *Paints and varnishes – Rapid deformation test*.

The method of test specified requires to be completed, for any particular application, by the following supplementary information. This information shall be derived from the national standard or other document for the product under test or, where appropriate, shall be the subject of agreement between the interested parties.

- a) Nature, thickness and surface preparation of substrate.
- b) Method of application of test coating to substrate.
- c) Thickness, in micrometres, of the dry coating, including method of measurement, and whether it is a single coating or a multicoat system.
- d) Duration and conditions of drying of the coated panel before testing (or conditions of stoving and ageing, if applicable).
- e) The specified depth of indentation, if applicable, at which the test is to be carried out.

1 SCOPE AND FIELD OF APPLICATION

1.1 This International Standard specifies an empirical test procedure for assessing the resistance of a coating of paint, varnish or related product to cracking and/or detachment

from a metal substrate when subjected to gradual deformation by indentation under standard conditions.

1.2 For a multicoat system, each coat may be tested separately or the complete system may be tested.

1.3 The method specified may be carried out

either as a "go/no go" test, by testing to a specified depth of indentation to assess compliance with a particular requirement;

or by gradually increasing the depth of indentation to determine the minimum depth at which the coating cracks and/or becomes detached from the substrate.

2 REFERENCES

ISO 1512, *Paints and varnishes – Sampling*.

ISO 1513, *Paints and varnishes – Examination and preparation of samples for testing*.

ISO 1514, *Paints and varnishes – Standard panels for testing*.

ISO 2808, *Paints and varnishes – Determination of film thickness*.

3 APPARATUS

3.1 The cupping test apparatus shall comply with the design and dimensions shown in the figure and shall consist essentially of the following :

3.1.1 **Die.** This is surface hardened and the surface in contact with the test panel is plane polished.

3.1.2 **Retaining ring.** The surface in contact with the test panel is plane polished and parallel to the contacting surface of the die.

1) In preparation.