

### SLOVENSKI STANDARD SIST EN ISO 7143:2007

01-julij-2007

BUXca Yý U. SIST EN ISO 7143:2004

Veziva za barve in lake - Metode preskušanja za karakterizacijo veziv na vodni osnovi (ISO 7143:2007)

Binders for paints and varnishes - Methods of test for characterizing water-based binders (ISO 7143:2007)

Bindemittel für Beschichtungsstoffe Prüfverfahren zur Charakterisierung von wasserverdünnbaren Bindemitteln (ISO 7143:2007) (Standards.iteh.ai)

Liants pour peintures et vernis - Méthodes d'essais pour caractériser les liants a base d'eau (ISO 7143:2007t)s://standards.iteh.ai/catalog/standards/sist/a2e3dff1-c9e8-441f-9e32-326b575b9c40/sist-en-iso-7143-2007

Ta slovenski standard je istoveten z: EN ISO 7143:2007

ICS:

87.060.20 Veziva Binders

SIST EN ISO 7143:2007 en;fr;de

# iTeh STANDARD PREVIEW (standards.iteh.ai)

### EUROPEAN STANDARD NORME EUROPÉENNE

### **EN ISO 7143**

EUROPÄISCHE NORM

February 2007

ICS 87.060.20

Supersedes EN ISO 7143:2004

#### **English Version**

### Binders for paints and varnishes - Methods of test for characterizing water-based binders (ISO 7143:2007)

Liants pour peintures et vernis - Méthodes d'essai pour caractériser les liants à base d'eau (ISO 7143:2007)

Bindemittel für Beschichtungsstoffe - Prüfverfahren zur Charakterisierung von wasserverdünnbaren Bindemitteln (ISO 7143:2007)

This European Standard was approved by CEN on 6 February 2007.

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 CEN Management Centre or to any CEN member.

This European Standard exists 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 CEN Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, 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 United Kingdom.

SIST EN ISO 7143:2007

https://standards.iteh.ai/catalog/standards/sist/a2e3dff1-c9e8-441f-9e32-326b575b9c40/sist-en-iso-7143-2007



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

Management Centre: rue de Stassart, 36 B-1050 Brussels

#### **Foreword**

This document (EN ISO 7143:2007) 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 August 2007, and conflicting national standards shall be withdrawn at the latest by August 2007.

This document supersedes EN ISO 7143:2004.

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, 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 United Kingdom.

#### **Endorsement notice**

The text of ISO 7143:2007 has been approved by CEN as EN ISO 7143:2007 without any modifications.

(standards.iteh.ai)

## INTERNATIONAL STANDARD

**ISO** 7143

Third edition 2007-02-01

Corrected version 2007-04-01

# Binders for paints and varnishes — Methods of test for characterizing water-based binders

Liants pour peintures et vernis — Méthodes d'essai pour caractériser les liants à base d'eau

### iTeh STANDARD PREVIEW (standards.iteh.ai)



#### PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

### iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>SIST EN ISO 7143:2007</u> https://standards.iteh.ai/catalog/standards/sist/a2e3dff1-c9e8-441f-9e32-326b575b9c40/sist-en-iso-7143-2007

#### © ISO 2007

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

### **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.

ISO 7143 was prepared by Technical Committee ISO/TC 35, *Paints and varnishes*, Subcommittee SC 10, *Test methods for binders for paints and varnishes*, in collaboration with CEN Technical Committee CEN/TC 139, *Paints and varnishes*.

This third edition cancels and replaces the second edition (ISO 7143:2000), which has been technically revised.

Teh STANDARD PREVIEW

The major changes are as follows: (standards.iteh.ai)

- a) water-based coating materials have been excluded from the scope because these products are not specified in accordance with this standard, ISO 7143:2007 https://standards.itch.ai/catalog/standards/sist/a2e3dff1-c9e8-441f-9e32-
- b) the determination of molecular mass has been added to Table 1;
- c) the normative references have been updated and the text has been editorially revised.

Readers should note that ISO 12000 gives definitions relative to polymer dispersions and lattices, and identifies the test methods applicable to the determination of their properties. ISO 12000 covers both aqueous and non-aqueous polymer dispersions, and products of synthetic and natural origin, including synthetic rubber latices. It was prepared by Technical Committee ISO/TC 61, *Plastics*, Subcommittee SC 9, *Thermoplastic materials*, in close collaboration with ISO/TC 45, *Rubber and rubber products*.

In this corrected version of ISO 7143:2007, the reference number of the standard in the fourth paragraph of the foreword has been corrected to read ISO 7143.

# iTeh STANDARD PREVIEW (standards.iteh.ai)

### Binders for paints and varnishes — Methods of test for characterizing water-based binders

### 1 Scope

This International Standard specifies methods of test for characterizing binders, i.e. aqueous dispersions and solutions of polymers and copolymers, in particular those used as raw materials for water-based coating materials. The properties determined will depend on whether a drying or curing system is tested.

#### 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 976, Rubber and plastics - Polymer dispersions and rubber latices - Determination of pH

ISO 2115, Plastics — Polymer dispersions Determination of white point temperature and minimum film-forming temperature

ISO 2811-1, Paints and varnishes — Determination of density — Part 1: Pyknometer method

ISO 3219, Plastics — Polymers/resins in the liquid state or as emulsions or dispersions — Determination of viscosity using a rotational viscometer with defined shear rate

ISO 3251, Paints, varnishes and plastics — Determination of non-volatile-matter content

ISO 4576, Plastics — Polymer dispersions — Determination of sieve residue (gross particle and coagulum content)

ISO 11357-2, Plastics — Differential scanning calorimetry (DSC) — Part 2: Determination of glass transition temperature

ISO 11359-2, Plastics — Thermomechanical analysis (TMA) — Part 2: Determination of coefficient of linear thermal expansion and glass transition temperature

ISO 13741-1, Plastics/rubber — Polymer dispersions and rubber latices (natural and synthetic) — Determination of residual monomers and other organic components by capillary-column gas chromatography — Part 1: Direct liquid injection method

ISO 13741-2, Plastics/rubber — Polymer dispersions and rubber latices (natural and synthetic) — Determination of residual monomers and other organic components by capillary-column gas chromatography — Part 2: Headspace method

ISO 13885-1, Binders for paints and varnishes — Gel permeation chromatography (GPC) — Part 1: Tetrahydrofuran (THF) as eluent

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

© ISO 2007 – All rights reserved