Värvid, lakid ja plastikud. Mittelenduvate ainete sisalduse määramine

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



EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN ISO 3251:2008 sisaldab Euroopa standardi EN ISO 3251:2008 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 24.04.2008 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 15.02.2008.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN ISO 3251:2008 consists of the English text of the European standard EN ISO 3251:2008.

This standard is ratified with the order of Estonian Centre for Standardisation dated 24.04.2008 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

Date of Availability of the European standard text 15.02.2008.

The standard is available from Estonian standardisation organisation.

ICS 83.080.01, 87.040, 87.060.20

Võtmesõnad: analysis, binders, chemical analysis and testin, materials, non-volatile matter determinatio, non-volatile matter determination, paints, plastics, portion, resin milk, resins, resins (natural), sampling, sampling methods, solvents, testing, varnishes, volatile

Standardite reprodutseerimis- ja levitamisõigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonilisse süsteemi või edastamine ükskõik millises vormis või millisel teel on keelatud ilma Eesti Standardikeskuse poolt antud kirjaliku loata.

EUROPEAN STANDARD NORME EUROPÉENNE

EUROPÄISCHE NORM

EN ISO 3251

February 2008

ICS 83.080.01; 87.040; 87.060.20

Supersedes EN ISO 3251:2003

English Version

Paints, varnishes and plastics - Determination of non-volatilematter content (ISO 3251:2008)

Peintures, vernis et plastiques - Détermination de l'extrait sec (ISO 3251:2008)

Beschichtungsstoffe und Kunststoffe - Bestimmung des Gehaltes an nichtflüchtigen Anteilen (ISO 3251:2008)

This European Standard was approved by CEN on 7 February 2008.

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.



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 3251:2008) 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 2008, and conflicting national standards shall be withdrawn at the latest by August 2008.

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 3251:2003.

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 the United Kingdom.

Endorsement notice

The text of ISO 3251:2008 has been approved by CEN as a EN ISO 3251:2008 without any modification.

Col	ntents	Page
_		
Fore	ewordScope	
1	Normative references	
2		
3	Terms and definitions	
4	Apparatus Sampling	
5	Procedure	
6	Supplementary test conditions	
7 8	Expression of results	
9	Precision	
9 10	Test report	
-	ex A (informative) Commonly used test parameters	
	ingraphy	
	одгарну	

Paints, varnishes and plastics — Determination of non-volatilematter content

1 Scope

This International Standard specifies a method for determining the non-volatile-matter content by mass of paints, varnishes, binders for paints and varnishes, polymer dispersions and condensation resins such as phenolic resins (resols, novolak solutions, etc.).

The method is also applicable to formulated dispersions containing fillers, pigments and other auxiliaries (e.g. thickeners and film-forming agents). For the method to be usable for unplasticized polymer dispersions and rubber latices, the non-volatile residue (which consists essentially of the polymeric material and of small quantities of auxiliaries such as emulsifiers, protective colloids, stabilizers, solvents added as film-forming agents and — especially for rubber latex concentrate — preserving agents) has to be chemically stable under the test conditions. For plasticized samples, the residue, by definition, normally includes the plasticizer.

NOTE 1 The non-volatile-matter content of a product is not an absolute quantity but depends upon the temperature and period of heating used for the determination. Consequently, when using this method, only relative and not true values for non-volatile-matter content are obtained owing to solvent retention, thermal decomposition and evaporation of low molecular mass constituents. The method is therefore primarily intended for testing different batches of the same type of product.

NOTE 2 This method is suitable for synthetic rubber latices provided heating for a specific period of time is considered appropriate (ISO 124 specifies heating until the loss in mass of a 2 g test portion following successive periods of heating is less than 0,5 mg).

NOTE 3 In-house methods for determining non-volatile matter often include drying with infrared or microwave radiation. Standardization of such methods is not possible, since they are not generally applicable. Some polymer compositions tend to decompose during such treatment and therefore give incorrect results.

ISO 3233 and ISO 23811 specify methods for determining the volume of non-volatile matter in paints, varnishes and related products.

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 123, Rubber latex — Sampling

ISO 124, Latex, rubber — Determination of total solids content

ISO 1513, Paints and varnishes — Examination and preparation of samples for testing

ISO 2431, Paints and varnishes — Determination of flow time by use of flow cups

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

© ISO 2008 – All rights reserved