

Zinc dust pigments for paints - Specifications and test methods

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN ISO 3549:2003 sisaldab Euroopa standardi EN ISO 3549:2002 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 18.02.2003 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN ISO 3549:2003 consists of the English text of the European standard EN ISO 3549:2002.</p> <p>This document is endorsed on 18.02.2003 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala: This International Standard specifies the requirements and corresponding test methods for zinc dust pigments suitable for use in protective coatings.</p>	<p>Scope: This International Standard specifies the requirements and corresponding test methods for zinc dust pigments suitable for use in protective coatings.</p>
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ICS 87.060.10

Võtmesõnad: chemical analysis and testin, coating material, definition, definitions, determination of content, dust, grain size, paints, pigments, protective coatings, screening (sizing), specification (approval), specifications, zinc, zinc dust, zinc dust pigments, testing, tests

English version

Zinc dust pigments for paints

Specifications and test methods
(ISO 3549 : 1995)

Pigments à base de poussière de
zinc pour peintures – Spécifications
et méthodes d'essai
(ISO 3549 : 1995)

Zinkstaub-Pigmente für Beschich-
tungsstoffe – Anforderungen und
Prüfverfahren (ISO 3549 : 1995)

This European Standard was approved by CEN on 2002-07-21.

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 Management Centre 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 Management Centre has the same status as the official versions.

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

CEN

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

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

Foreword

International Standard

ISO 3549 : 1995 Zinc dust pigments for paints – Specifications and test methods, which was prepared by ISO/TC 35 'Paints and varnishes' of the International Organization for Standardization, has been adopted by Technical Committee CEN/TC 298 'Pigments and extenders', the Secretariat of which is held by DIN, as a European Standard.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, and conflicting national standards withdrawn, by March 2003, at the latest.

In accordance with the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard:

Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

Endorsement notice

The text of the International Standard ISO 3549 : 1995 was approved by CEN as a European Standard without any modification.

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

1 Scope

This International Standard specifies the requirements and corresponding test methods for zinc dust pigments suitable for use in protective coatings.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 565:1990, *Test sieves — Metal wire cloth, perforated metal plate and electroformed sheet — Nominal sizes of openings*.

ISO 594-1:1986, *Conical fittings with a 6 % (Luer) taper for syringes, needles and certain other medical equipment — Part 1: General requirements*.

ISO 842:1984, *Raw materials for paints and varnishes — Sampling*.

ISO 3696:1987, *Water for analytical laboratory use — Specification and test methods*.

3 Definition

For the purposes of this International Standard, the following definition applies.

3.1 zinc dust pigment: A fine grey powder of essentially spheroidal particles, mainly consisting of metallic zinc.

NOTE 1 Zinc dust pigments for paints may vary in their metallic zinc content, chemical purity, particle shape, particle size distribution, mean and maximum diameter, etc. These variations are all likely to have an influence on the zinc dust behaviour in paints with regard to parameters such as dispersibility, fineness of grind, reactivity, electrical conductivity and packing properties.

4 Required characteristics and tolerances

4.1 For zinc dust pigments complying with this International Standard, the essential requirements are specified in tables 1 and 2.

Table 1 — Composition of zinc dust pigment

Characteristic	Unit	Requirement	Test method
Total zinc content	% (m/m)	min. 98	See clause 7
Metallic zinc content	% (m/m)	min. 94	See clause 8
Lead (Pb) content	% (m/m)	max. 0,2	See clause 9
Cadmium (Cd) content	% (m/m)	max. 0,1	See clause 9
Iron (Fe) content	% (m/m)	max. 0,05	See clause 9
Arsenic (As) content	% (m/m)	max. 0,000 5	See clause 10
Chloride (Cl) content	% (m/m)	max. 0,005	See clause 11
Matter insoluble in acid	% (m/m)	max. 0,05	See clause 12

NOTE — If the zinc oxide content is required, this can be calculated by multiplying the difference between the total zinc content and the metallic zinc content by 1,244 7.