

SLOVENSKI STANDARD SIST EN ISO 787-8:1997

01-december-1997

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General methods of test for pigments and extenders - Part 8: Determination of matter soluble in water - Cold extraction method (ISO 787-8:1979)

Allgemeine Prüfverfahren für Pigmente und Füllstoffe - Teil 8: Bestimmung der wasserlöslichen Anteile - Kaltextraktionsverfahren (ISO 787-8:1979)

Méthodes générales d'essai des pigments et matieres de charge - Partie 8: Détermination des matieres solubles dans l'eau - Méthode par extraction a froid (ISO 787-8:1979) https://standards.iteh.ai/catalog/standards/sist/8134240a-3fc4-4257-8d94-4fe8648c3b90/sist-en-iso-787-8-1997

Ta slovenski standard je istoveten z: EN ISO 787-8:1995

ICS:

87.060.10 Pigmenti in polnila Pigments and extenders

SIST EN ISO 787-8:1997

en



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EUROPEAN STANDARD

EN ISO 787-8

NORME EUROPÉENNE

EUROPÄISCHE NORM

March 1995

ICS 87.060.10

Descriptors:

paints, pigments, tests, chemical analysis, determination of content, soluble matter, water, extraction method

English version

General methods of test for pigments and extenders - Part 8: Determination of matter soluble in water - Cold extraction method (ISO 787-8:1979)



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CEN

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

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• 1995

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Ref. No. EN ISO 787-8:1995 E

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Foreword

This European Standard has been taken over by the Technical Committee CEN/TC 298 "Pigments and extenders" 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of an identical text or by endorsement, at the latest by September 1995, and conflicting national standards shall be withdrawn at the latest by September 1995.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 787-8:1979 has been approved by CEN as a European Standard without any modification.

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International Standard



787/8

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION MEX DYNAPODHAR OPFAHUSAUUR NO CTAHDAPTUSAUUMOORGANISATION INTERNATIONALE DE NORMALISATION

General methods of test for pigments and extenders – Part 8 : Determination of matter soluble in water – Cold extraction method

Méthodes générales d'essai des pigments et des matières de charge – Partie 8 : Détermination des matières solubles dans l'eau – Méthode par extraction à froid STANDARD PREVIEW

First edition - 1979-09-15

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Descriptors : paints, pigments, tests, chemical analysis, determination of content, soluble matter, water, extraction analysis

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 nongovernmental, 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.

Teh S IEW International Standard ISO 787/8 was developed by Technical Committee ISO/ TC 35

Paints and varnishes, and was circulated to the member bodies in November 1977

It has been approved by the member bodies of the following countries : 1997

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Australia	¹ Israel	4fe8648c3b90/86-787-8-1997 South Africa, Rep. of
Brazil	Italy	South Africa, Rep. of
Canada	Kenya	Spain
Egypt, Arab Rep. of	Mexico	Sweden
France	Netherlands	Switzerland
Germany, F. R.	New Zealand	Turkey
India	Norway	United Kingdom
Iran	Peru	USSR
Ireland	Poland	

No member body expressed disapproval of the document.

This International Standard cancels and replaces ISO Recommendation R 787/8-1970 of which it constitutes a technical revision.

General methods of test for pigments and extenders — Part 8 : Determination of matter soluble in water — Cold extraction method

0 Introduction

This document is a part of ISO 787, *General methods of test for pigments and extenders*. The first edition was published in June 1970 and subsequently work was carried out in an attempt to improve reproducibility. As a result of this work, it was found that three factors were of prime importance. The first was the type of water used, the second was the type of filter used and the third was the mass of the test portion. Unfortunately insufficient tests have been carried out to be able to fix reliable reproducibility limits but it is considered inappropriate to proceed further with the work.

3 Reagent

Distilled water, fresh, double distilled and cooled, or deionized water, of pH 6 to 7.

NOTE — Other water may be used but only by agreement between the interested parties.

4 Apparatus iTeh STANDARD PREVIEW 4.1 One-mark volumetric flask, of capacity 250 ml. (standards.iteh.ai) 4.2 Colloid filter.

1 Scope and field of application

 SIST EN ISO 787-8:1097 NOTE 1. Other types of filter may be used but only by agreement betmethod of test for determining the percentage by mass of mats-en-iso-787-8-1997 ter soluble in cold water, in a sample of pigment or extender.

1.2 Part 3 of this International Standard specifies a method for determining the percentage by mass of matter soluble in water by hot extraction. For most pigments and extenders, these two test methods will give different results, and it is therefore essential to state clearly in a specification which method is to be used, and in the test report which method has been used.

NOTE — When this general method is applicable to a given pigment or extender, only a cross-reference to it need be included in the International Standard relating to that pigment or extender, with a note of any detailed modification which may be needed in view of the special properties of the material in question. Only when neither of these general methods is applicable to a particular material should a special method for determination of water-soluble matter be specified.

2 References

ISO 787, General methods of test for pigments and extenders — Part 3 : Determination of matter soluble in water — Hot extraction method.

ISO 842, Raw materials for paints and varnishes - Sampling.

4.3 Evaporating dish, flat-bottomed, of glass, platinum, glazed porcelain or silica.

- **4.4** Oven, capable of being maintained at 105 \pm 2 °C.
- 4.5 Balance, accurate to 1 mg or better.
- 4.6 Desiccator.

5 Sampling

Take a representative sample of the material to be tested as described in ISO 842.

6 Procedure

6.1 Test portion

Weigh 2 to 20 g of the sample, to the nearest 0,01 g, into a beaker.

NOTE — The mass of the test portion used shall be chosen according to the type of the material and to the amount of water-soluble matter in the material. This is particularly important for materials that contain large amounts of matter soluble in water. In any case, the same test portion mass shall be taken for repeat tests or for tests between different laboratories.

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6.2 Determination

Wet the test portion in the beaker with a few millilitres of the water (clause 3).

NOTE — If the material does not disperse easily in water, a wetting agent should be used. In the case of materials not soluble in ethanol, 5 ml of ethanol may be used; in the case of pigments soluble in ethanol, a non-ionic wetting agent such as 10 ml of a 0,01 % solution of a ethylene oxide condensate should be used. If the wetting agent is non-volatile under the conditions of test, an appropriate correction derived from a blank test should be made.

Add 200 ml of the water (cooled to room temperature) and stir continuously for 1 h at room temperature. Transfer to the volumetric flask (4.1) and dilute to the mark with the water. Mix throughly by shaking and inversion, and filter through the colloid filter (4.2), returning the filtrate to the filter until it runs clear. Evaporate 100 ml of the perfectly clear filtrate to dryness in the previously weighed evaporating dish (4.3) on a water bath.

Dry the residue in the evaporating dish in the oven (4.4) at $105 \pm 2 \,^{\circ}$ C, cool in the desiccator (4.6) and weigh to the nearest 1 mg. Repeat the heating and cooling until the results of the two last weighings, at an interval including at least 30 min heating, do not differ by more than 10 % of the final figure obtained for the water-soluble matter.

7 Expression of results

as a percentage by mass, is given by the formula

$$\frac{250 m_1}{m_0}$$

where

- m_0 is the mass, in grams, of the test portion;
- m_1 is the mass, in grams, of residue.

Take the mean of two determinations and report the result to one decimal place.

8 Test report

The test report shall contain at least the following information :

- a) the type and identification of the product tested;
- b) a reference to this International Standard (ISO 787/8);
- c) the result of the test as indicated in clause 7;

d) the mass of the test portion used;

e) any deviation, by agreement or otherwise, from the specified, particularly any details of the filter and the water used;

The water-soluble matter (cold extraction method), expressed in the test. https://standards.iteh.ai/catalog/standards/sist/8134240a-3fc4-4257-8d94-

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