International Standard 787/8

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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

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Foreword

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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.

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 :

Australia	Israel	Romania
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.

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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.

1 Scope and field of application

1.1 Part 8 of this International Standard specifies a general method of test for determining the percentage by mass of matter 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.*

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

4.1 One-mark volumetric flask, of capacity 250 ml.

4.2 Colloid filter.

NOTE — Other types of filter may be used but only by agreement between the interested parties.

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

4.4 Oven, capable of being maintained at 105 ± 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.