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General methods of test for pigments —

Part 19: Determination of water-soluble nitrates (Salicylic acid method)

Méthodes générales d'essais des pigments —

Partie 19: Détermination des nitrates solubles dans l'eau (Méthode à l'acide salicylique)

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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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 256, *Pigments, dyestuffs and extenders*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 298, *Pigments and extenders*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This second edition cancels and replaces the first edition (ISO 787-19:1974), which has been technically revised.

The main changes compared to the previous edition are as follows:

— the normative references have been updated;

— the document has been editorially revised.

A list of all parts in the ISO 787 series can be found on the ISO website.

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General methods of test for pigments —

Part 19: Determination of water-soluble nitrates (Salicylic acid method)

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1 Scope

This document specifies a general method of test for determining the water-soluble nitrates in a sample of pigments by a spectrophotometric method using salicylic acid.

ISO 787-13 specifies a method for determining the water-soluble nitrates in a sample of pigments using Nessler`s method.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 648, *Laboratory glassware — Single-volume pipettes*

ISO 835, *Laboratory glassware — Graduated pipettes*

ISO 1042, *Laboratory glassware — One-mark volumetric flasks*

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

3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at http://www.electropedia.org/

4 Principle

The nitrate present in the extract of the pigment sample is used to nitrate salicylic acid in sulphuric acid medium. The nitro-compound formed is of an intensive yellow colour in alkaline solution and the colour is measured spectrometrically at a wavelength of 410 nm.

5 Reagents

All reagents used shall be of recognized analytical reagent quality. Distilled water, or water of equivalent purity, shall be used.

5.1 Sulphuric acid, ρ = 1,84 g/ml.

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