
**General methods of test for pigments
and extenders —**

**Part 17:
Comparison of lightening power of
white pigments**

*Méthodes générales d'essai des pigments et matières de charge —
Partie 17: Comparaison du pouvoir éclaircissant des pigments blancs*



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Foreword

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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 on 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 the following URL: www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 256, *Pigments, dyestuffs and extenders*.

This third edition cancels and replaces the second edition (ISO 787-17:2002), of which it constitutes a minor revision. The changes compared to the previous edition are as follows:

- [Clause 3](#) “Terms and definitions”, with a general reference to ISO 18451-1, has been added;
- CAS numbers have been added to the reagents;
- the text has been editorially revised.

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

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

General methods of test for pigments and extenders —

Part 17:

Comparison of lightening power of white pigments

1 Scope

This document specifies a general method of test for comparing the lightening (reducing) power of a white pigment with the lightening power of an agreed sample of the same type.

Two procedures (A and B) are specified. Procedure A is quicker than procedure B and is suitable for testing one sample of pigment; procedure B is better for testing several samples, and especially if a pigment of unknown lightening power is being tested.

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 788, *Ultramarine pigments for paints*

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

ISO 18451-1, *Pigments, dyestuffs and extenders — Terminology — Part 1: General terms*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 18451-1 apply.

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 Reagent

4.1 Blue paste, with the following composition:

- castor oil, medicinal quality: 500 g (CAS-No. 8001-79-4);
- precipitated calcium sulfate, $\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$: 475 g (CAS-No. 10101-41-4);
- ultramarine blue complying with ISO 788: 5 g;
- treated natural earth¹⁾: 20 g.

The paste shall be prepared as follows.

Mix the treated natural earth in a beaker with sufficient castor oil to give a uniform paste and then gradually stir in the remaining castor oil. Heat the mixture so obtained to a temperature of 50 °C and,

1) A prepared bentonite is a suitable material.