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**Splošne metode preskušanja pigmentov in polnil - 24. del: Določanje relativne barvne jakosti barvastih pigmentov in relativne moči sipanja belih pigmentov - Fotometrične metode (ISO 787-24:1985)**

General method of tests for pigments and extenders - Part 24: Determination of relative tinting strength of coloured pigments and relative scattering power of white pigments - Photometric methods (ISO 787-24:1985)

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Allgemeine Prüfverfahren für Pigmente und Füllstoffe - Teil 24: Bestimmung der relativen Farbstärke von Buntpigmenten und des relativen Streuvermögens von Weißpigmenten - Photometrische Verfahren (ISO 787-24:1985)

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Méthodes générales d'essai des pigments et matières de charge - Partie 24: Détermination du pouvoir colorant relatif des pigments colorés et du pouvoir diffusant relatif des pigments blancs - Méthodes photométriques (ISO 787-24:1985)

**Ta slovenski standard je istoveten z: EN ISO 787-24:1995**

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**ICS:**

87.060.10      Pigmenti in polnila      Pigments and extenders

**SIST EN ISO 787-24:1997**      **en**

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EUROPEAN STANDARD

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Descriptors: paints, pigments, tests, determination, colouring power, photometric method

English version

**General methods of test for pigments and  
extenders - Part 24: Determination of relative  
tinting strength of coloured pigments and relative  
scattering power of white pigments - Photometric  
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du pouvoir colorant relatif des pigments  
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Füllstoffe - Teil 24: Bestimmung der relativen  
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# CEN

European Committee for Standardization  
Comité Européen de Normalisation  
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• 1995

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Ref. No. EN ISO 787-24:1995 E

## Foreword

The text of the International Standard from ISO/TC 35 "Paints and varnishes" of the International Organization for Standardization (ISO) has been taken over as a European Standard by the Technical Committee CEN/TC 298 "Pigments and extenders".

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 February 1996, and conflicting national standards shall be withdrawn at the latest by February 1996.

According to 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 and the United Kingdom.

## Endorsement notice

The text of the International Standard ISO 787-24:1985 has been approved by CEN as a European Standard without any modification.

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NOTE: Normative references to International publications are listed in annex ZA (normative).

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**Annex ZA (normative)****Normative references to international publications  
with their relevant European publications**

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN</u>	<u>Year</u>
ISO 1524	1983	Paints and varnishes - Determination of fineness of grind	EN 21524	1991
ISO 3219	1993	Plastics - Polymers/resins in the liquid state or as emulsions or dispersions - Determination of viscosity using a rotation viscometer with defined shear rate	EN ISO 3219	1994

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# International Standard



# 787/24

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION • МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ • ORGANISATION INTERNATIONALE DE NORMALISATION

## General methods of test for pigments and extenders — Part 24 : Determination of relative tinting strength of coloured pigments and relative scattering power of white pigments — Photometric methods

*Méthodes générales d'essai des pigments et matières de charge — Partie 24 : Détermination du pouvoir colorant relatif des pigments colorés et du pouvoir diffusant relatif des pigments blancs — Méthodes photométriques*

Second edition — 1985-12-15

[SIST EN ISO 787-24:1997](https://standards.iteh.ai/catalog/standards/sist/6b1b2a0d-d739-4f85-9bef-ec500c28915b/sist-en-iso-787-24-1997)

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UDC 667.622 : 535.24 : 535.362

Ref. No. ISO 787/24-1985 (E)

**Descriptors** : paints, pigments, tests, determination, colouring power, photometric method.

## 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.

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. They are approved in accordance with ISO procedures requiring at least 75 % approval by the member bodies voting.

International Standard ISO 787/24 was prepared by Technical Committee ISO/TC 35, *Paints and varnishes*.

This second edition cancels and replaces the first edition (ISO 787/24-1982), of which it constitutes a minor revision.

Users should note that all International Standards undergo revision from time to time and that any reference made herein to any other International Standard implies its latest edition, unless otherwise stated.

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The purpose of this International Standard is to establish a series of general test methods for pigments and extenders which are suitable for all or many of the individual pigments and extenders for which specifications might be required. In such cases, a cross-reference to the general method should be included in the International Standard relating to that pigment or extender, with a note of any detailed modification which might be needed in view of the special properties of the product in question.

Technical Committee ISO/TC 35, *Paints and varnishes*, decided that all the general methods should be published as they become available, as parts of a single International Standard, in order to emphasize the relationship of each to the whole series.

The Technical Committee also decided that, where two or more procedures were widely used for determining the same or a similar characteristic of a pigment or extender, there would be no objection to including more than one of them in the ISO series. In such cases it will, however, be essential to state clearly in a specification which method is to be used and, in the test report, which method has been used.

Parts of the series already published are as follows :

SIST EN ISO 787-24:1997

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- Part 1 : Comparison of colour of pigments
- Part 2 : Determination of matter volatile at 105 °C
- Part 3 : Determination of matter soluble in water — Hot extraction method
- Part 4 : Determination of acidity or alkalinity of the aqueous extract
- Part 5 : Determination of oil absorption value
- Part 7 : Determination of residue on sieve — Water method — Manual procedure
- Part 8 : Determination of matter soluble in water — Cold extraction method
- Part 9 : Determination of pH value of an aqueous suspension
- Part 10 : Determination of density — Pyknometer method
- Part 11 : Determination of tamped volume and apparent density after tamping
- Part 13 : Determination of water-soluble sulfates, chlorides and nitrates
- Part 14 : Determination of resistivity of aqueous extract
- Part 15 : Comparison of resistance to light of coloured pigments of similar types
- Part 16 : Determination of relative tinting strength (or equivalent colouring value) and colour on reduction of coloured pigments — Visual comparison method
- Part 17 : Comparison of lightening power of white pigments
- Part 18 : Determination of residue on sieve — Water method — Mechanical flushing procedure
- Part 19 : Determination of water-soluble nitrates — Salicylic acid method
- Part 20 : Comparison of ease of dispersion — Oscillatory shaking method
- Part 21 : Comparison of heat stability of pigments using a stoving medium
- Part 22 : Comparison of resistance to bleeding of pigments
- Part 23 : Determination of density (using a centrifuge to remove entrained air)
- Part 24 : Determination of relative tinting strength of coloured pigments and relative scattering power of white pigments — Photometric methods

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# General methods of test for pigments and extenders — Part 24 : Determination of relative tinting strength of coloured pigments and relative scattering power of white pigments — Photometric methods

## 0 Introduction

This document is a part of ISO 787, *General methods of test for pigments and extenders*.

## 1 Scope and field of application

This part of ISO 787 describes photometric methods of test for comparing in the visible spectrum

- a) the tinting strength of two similar (see note 1) coloured pigments dispersed in an alkyd resin without a drier;
- b) the scattering power of two white pigments of the same type dispersed in an alkyd resin without a drier.

These methods of test provide an instrumental alternative to those described in ISO 787/16 and ISO 787/17 respectively, avoiding the necessity of visual matching.

### NOTES

1 This International Standard is not appropriate for the comparison of coloured pigments that on reduction differ greatly in colour.

2 When one of these general methods is applicable to a given pigment, only a cross-reference to the appropriate method should be included in the International Standard relating to that pigment, indicating any detailed modification which may be needed in view of the special properties of the product in question. Only when the appropriate method in this part of ISO 787 is not applicable to a particular product should different photometric methods for determination of relative tinting strength and determination of relative scattering power be specified.

## 2 References

ISO 591, *Titanium dioxide pigments for paints*.

ISO 787, *General methods of test for pigments and extenders —*

*Part 2 : Determination of matter volatile at 105 °C.*

*Part 9 : Determination of pH value of an aqueous suspension.*

*Part 10 : Determination of density — Pyknometer method.*

*Part 16 : Determination of relative tinting strength (or equivalent colouring value) and colour on reduction of coloured pigments — Visual comparison method.*

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

*Part 23 : Determination of density (using a centrifuge to remove entrained air).*

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

ISO 1524, *Paints and varnishes — Determination of fineness of grind.*

ISO 3219, *Plastics — Polymers in the liquid, emulsified or dispersed state — Determination of viscosity with a rotational viscometer working at defined shear rate.*

ISO 3262, *Extenders for paints.*

ISO 3682, *Binders for paints and varnishes — Determination of acid value — Titrimetric method.*

ISO 4629, *Binders for paints and varnishes — Determination of hydroxyl value — Titrimetric method.*<sup>1)</sup>

ISO 4652, *Rubber compounding ingredients — Carbon black — Determination of specific surface area — Nitrogen adsorption methods.*

ISO 6209, *Rubber compounding ingredients — Carbon black — Determination of solvent extractable material.*

1) In course of preparation. (Revision of ISO 4629-1978.)