

General methods of test for pigments and extenders -
Part 21: Comparison of heat stability of pigments using
a stoving medium (ISO 787-21:1979)

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

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Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 18.10.2017.	Date of Availability of the European standard is 18.10.2017.
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English Version

General methods of test for pigments and extenders - Part 21: Comparison of heat stability of pigments using a stoving medium (ISO 787-21:1979)

Méthodes générales d'essai des pigments et matières de charge - Partie 21: Comparaison de la stabilité à la chaleur des pigments en utilisant un liant au four (ISO 787-21:1979)

Allgemeine Prüfmethode für Pigmente und Füllstoffe - Teil 21: Vergleich der Hitzebeständigkeit von Pigmenten unter Verwendung eines Einbrennbindemittels (ISO 787-21:1979)

This European Standard was approved by CEN on 21 September 2017.

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European foreword

The text of ISO 787-21:1979 has been prepared by Technical Committee ISO/TC 256 "Pigments, dyestuffs and extenders" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 787-21:2017 by Technical Committee CEN/TC 298 "Pigments and extenders" the secretariat of which is held by DIN.

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of an identical text or by endorsement, at the latest by April 2018, and conflicting national standards shall be withdrawn at the latest by April 2018.

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Endorsement notice

The text of ISO 787-21:1979 has been approved by CEN as EN ISO 787-21:2017 without any modification.

General methods of test for pigments and extenders — Part 21 : Comparison of heat stability of pigments using a stoving medium

0 Introduction

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

Although the method as written is intended for comparing the heat stability of pigments by specifying the temperatures of heating and the time of heating, it may also be used for determining the heat resistance of a pigment.

1 Scope and field of application

This part of ISO 787 specifies a general method of test for comparing the heat stability of the pigment under test against that of an agreed sample.

NOTE — When this general method is applicable to a given pigment, only a cross-reference to it should be included in the International Standard relating to that pigment, with a note of any detailed modification which may be needed in view of the special properties of the pigment in question. Only when this general method is not applicable to a particular pigment should a special method for comparison of heat stability be specified.

2 References

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

ISO 3668, *Paints and varnishes — Visual comparison of the colour of paints*.

3 Apparatus and materials

3.1 Panels

Any suitable light-gauge metal panels, for example of bright tinplate or aluminium, conveniently 150 mm × 100 mm, the surfaces of which have been cleaned and lightly abraded, or other suitable panels as agreed between the interested parties.

3.2 Agreed stoving medium.

3.3 **Oven**, well ventilated and capable of being maintained at the agreed temperature.

4 Sampling

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

5 Procedure

Prepare a dispersion of the pigment under test (alone or reduced to an agreed colour) in the agreed stoving medium by a suitable method to be agreed between the interested parties, including dilution of the dispersion to an appropriate consistency by further addition of the agreed medium or solvent.

Prepare a dispersion of the agreed sample in the same manner in the same medium.

Apply the dispersion of the pigment under test by an agreed method over the whole surface of a test panel, to give a wet film thickness of 75 to 120 µm. Apply the dispersion of the agreed sample in the same manner to the whole surface of another panel.

Allow the coated panels to remain at 23 ± 2 °C and (50 ± 5) % relative humidity for 30 min and then cut each panel into a suitable number of strips, each not less than 30 mm wide, to carry out the required tests, labelling each strip.

Stove one strip of each panel for an adequate period at the lowest temperature that will ensure full curing of the film.

NOTE — These panels are the standards against which other panels will be compared.

Stove other strip(s) of the panels coated with the test sample and agreed sample respectively at the temperature(s) and for the time(s) agreed between the interested parties.

Allow the panels to cool to room temperature.

By the procedure described in ISO 3668, compare in diffuse daylight the panels stoved at the higher temperature(s) of both the test sample and the agreed sample with the corresponding standard panels stoved at the minimum temperature. If daylight is not available, make the comparison in artificial daylight.

If required, the comparison shall be repeated after 48 h.