



**SLOVENSKI STANDARD
SIST EN ISO 20427:2025**

01-februar-2025

Pigmenti in polnila - Postopek disperzije za določanje porazdelitve velikosti delcev na podlagi sedimentacije suspendiranih pigmentov ali polnil v tekoči fazi (ISO 20427:2023)

Pigments and extenders - Dispersion procedure for sedimentation-based particle sizing of suspended pigment or extender with liquid sedimentation methods (ISO 20427:2023)

Pigmente und Füllstoffe - Dispergierverfahren zur sedimentativen Teilchengrößenbestimmung von suspendierten Pigmenten oder Füllstoffen mit Flüssigsedimentationsverfahren (ISO 20427:2023)

Pigments et matières de charge - Procédure de dispersion pour la granulométrie par sédimentation d'un pigment ou d'une charge en suspension à l'aide de méthodes de sédimentation en milieu liquide (ISO 20427:2023)

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Ta slovenski standard je istoveten z: EN ISO 20427:2024

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87.060.10 Pigmenti in polnila Pigments and extenders

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EUROPEAN STANDARD

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August 2024

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English Version

Pigments and extenders - Dispersion procedure for
sedimentation-based particle sizing of suspended pigment
or extender with liquid sedimentation methods (ISO
20427:2023)

Pigments et matières de charge - Mode opératoire de dispersion pour la détermination granulométrique basée sur la sédimentation des pigments ou matières de charge en suspension par des méthodes de sédimentation dans un liquide (ISO 20427:2023)

Pigmente und Füllstoffe - Dispergiervverfahren zur sedimentativen Teilchengrößenbestimmung von suspendierten Pigmenten oder Füllstoffen mit Flüssigsedimentationsverfahren (ISO 20427:2023)

This European Standard was approved by CEN on 19 August 2024.

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COMITÉ EUROPÉEN DE NORMALISATION
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European foreword

The text of ISO 20427:2023 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 20427:2024 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 February 2025, and conflicting national standards shall be withdrawn at the latest by February 2025.

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INTERNATIONAL
STANDARD

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**Pigments and extenders — Dispersion
procedure for sedimentation-based
particle sizing of suspended pigment
or extender with liquid sedimentation
methods**

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

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.

Pigments and extenders — Dispersion procedure for sedimentation-based particle sizing of suspended pigment or extender with liquid sedimentation methods

1 Scope

This document specifies sample preparation methods to determine the size distribution of separate particles of a single pigment or extender, which is dispersed in a liquid by application of a standardized dispersion procedure, using an ultrasonic device, shaker device or wet jet mill.

The sample preparation methods described are optimized for measurements carried out with a particle sizing technique based on sedimentation. This technique relies on particle migration due to gravitation or centrifugal forces and requires a density contrast between the particles and the liquid phase.

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 3696, *Water for analytical laboratory use — Specification and test methods*

ISO 9276-1, *Representation of results of particle size analysis — Part 1: Graphical representation*

ISO 13317-1, *Determination of particle size distribution by gravitational liquid sedimentation methods — Part 1: General principles and guidelines*

ISO 13317-2, *Determination of particle size distribution by gravitational liquid sedimentation methods — Part 2: Fixed pipette method*

ISO 13317-3, *Determination of particle size distribution by gravitational liquid sedimentation methods — Part 3: X-ray gravitational technique*

ISO 13317-4, *Determination of particle size distribution by gravitational liquid sedimentation methods — Part 4: Balance method*

ISO 13318-1:2001, *Determination of particle size distribution by centrifugal liquid sedimentation methods — Part 1: General principles and guidelines*

ISO 13318-2, *Determination of particle size distribution by centrifugal liquid sedimentation methods — Part 2: Photocentrifuge method*

ISO 13318-3, *Determination of particle size distribution by centrifugal liquid sedimentation methods — Part 3: Centrifugal X-ray method*

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

ASTM D5965, *Standard Test Methods for Density of Coating Powders*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.