

Coating powders - Part 10: Determination of deposition efficiency (ISO 8130-10:2021)

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN ISO 8130-10:2021 sisaldab Euroopa standardi EN ISO 8130-10:2021 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 8130-10:2021 consists of the English text of the European standard EN ISO 8130-10:2021.
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 and Accreditation.
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English Version

Coating powders - Part 10: Determination of deposition efficiency (ISO 8130-10:2021)

Poudres pour revêtement - Partie 10: Détermination du rendement d'application (ISO 8130-10:2021)

Pulverlacke - Teil 10: Bestimmung des Abscheide-Wirkungsgrades (ISO 8130-10:2021)

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EUROPEAN COMMITTEE FOR STANDARDIZATION
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European foreword

This document (EN ISO 8130-10:2021) has been prepared by Technical Committee ISO/TC 35 "Paints and varnishes" in collaboration with Technical Committee CEN/TC 139 "Paints and varnishes" 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of an identical text or by endorsement, at the latest by January 2022, and conflicting national standards shall be withdrawn at the latest by January 2022.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN ISO 8130-10:2010.

Any feedback and questions on this document should be directed to the users' national standards body/national committee. A complete listing of these bodies can be found on the CEN websites.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Endorsement notice

The text of ISO 8130-10:2021 has been approved by CEN as EN ISO 8130-10:2021 without any modification.

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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 35, *Paints and varnishes*, Subcommittee SC 9, *General test methods for paints and varnishes*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 139, *Paints and varnishes*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This second edition cancels and replaces the first edition (ISO 8130-10:1998), which has been technically revised. The main changes compared to the previous edition are as follows:

- the test report has been modified;
- the precision data have been deleted;
- the text has been editorially revised and the normative references have been updated.

A list of all parts in the ISO 8130 series can be found on the ISO website.

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Coating powders —

Part 10:

Determination of deposition efficiency

1 Scope

This document specifies a method for determining the mass fraction in per cent (%) of a sprayed coating powder which is deposited on a test item under known spray gun and environmental conditions.

The method is applicable to powders applied by corona or tribo charging and can be used to compare the deposition efficiency of different powders with the same or different gun with the same powder.

This method is only used for comparison when powders or guns are evaluated consecutively, as the influence of the environment and the equipment can vary significantly with time and location.

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 8130-14, *Coating powders — Part 14: Vocabulary*

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

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 8130-14 and the following 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 <https://www.electropedia.org/>

3.1

deposition efficiency

proportion of the mass of powder deposited compared to the mass of powder sprayed, expressed as a mass fraction in per cent

4 Principle

The method consists of spraying charged powder, at a known flow rate and under known conditions of temperature and humidity. The powder is sprayed onto five similar steel items each wrapped in an aluminium foil. The mass of powder deposited onto the central item is determined, from which the deposition efficiency is calculated.

The operation is performed in an air extraction booth.