
Coating powders —
Part 11:
Inclined-plane flow test

Poudres pour revêtement —

Partie 11: Essai d'écoulement sur plan incliné





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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).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

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*.

This second edition cancels and replaces the first edition (ISO 8130-11:1997), which has been technically revised.

The main changes compared to the previous edition are as follows:

- a “Terms and definitions” clause has been added;
- the procedure has been revised;
- information on the results of a round robin test has been added;
- the text has been editorially revised and the normative references have been updated.

A list of all the parts in the ISO 8130 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.

Coating powders —

Part 11: Inclined-plane flow test

1 Scope

This document specifies a comparative method for determining the flow characteristic of a fused thermosetting coating powder down a plane inclined at a set angle to the horizontal.

The aim of the test method described in this document gives an indication of the degree of melt flow that can occur during the curing of the coating powder. This characteristic contributes to the surface appearance and to the degree of coverage over sharp edges.

The test is a comparative method for checking for batch to batch variation in the behaviour of a given coating powder. Correlation between the results from coating powders of differing composition is not to be expected.

This method is not suitable for coating powders which have gel times of less than 1 min at the test temperature when characterised according to ISO 8130-6. This method is also not suitable for textured powders.

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 8130-2, *Coating powders — Part 2: Determination of density by gas comparison pyknometer (referee method)*

ISO 8130-3, *Coating powders — Part 3: Determination of density by liquid displacement pyknometer*

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 specific terms and definitions given in ISO 8130-14 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 Principle

The thermosetting coating powder is pressed in to a pellet of standard size which is allowed to melt and flow down a heated inclined plate. The extent of flow is measured from the initial position of the pellet for a given time.