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Plastics - Determination of ash - Part 5: Poly(vinyl chloride) (ISO 3451-5:2025)

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 07/25

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Plastiques - Détermination du taux de cendres - Partie
5: Poly(chlorure de vinyle) (ISO 3451-5:2025)

Kunststoffe - Bestimmung der Asche - Teil 5:
Polyvinylchloride (ISO 3451-5:2025)

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EN ISO 3451-5:2025 (E)

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European foreword

This document (EN ISO 3451-5:2025) has been prepared by Technical Committee ISO/TC 61 "Plastics" in collaboration with Technical Committee CEN/TC 249 "Plastics" the secretariat of which is held by SIS.

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of an identical text or by endorsement, at the latest by November 2025, and conflicting national standards shall be withdrawn at the latest by November 2025.

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.

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Endorsement notice

The text of ISO 3451-5:2025 has been approved by CEN as EN ISO 3451-5:2025 without any modification.



International Standard

ISO 3451-5

Plastics — Determination of ash — Part 5: Poly(vinyl chloride)

*Plastiques — Détermination du taux de cendres —
Partie 5: Poly(chlorure de vinyle)*

**Third edition
2025-04**

ISO 3451-5:2025(en)



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ISO 3451-5:2025(en)**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 61, *Plastics*, Subcommittee SC 5, *Physical-chemical properties*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 249, *Plastics*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This third edition cancels and replaces the second edition (ISO 3451-5:2002), which has been technically revised.

The main changes are as follows:

- the test conditions have been adapted to relevant fillers;
- the thermobalance has been added as alternative method;
- the results of an interlaboratory comparison have been added to justify the changed test conditions for PVC compounds filled with chalk (CaCO₃).

A list of all parts in the ISO 3451 series can be found on the ISO website.

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Plastics — Determination of ash —

Part 5: Poly(vinyl chloride)

WARNING — The use of this document may involve hazardous chemicals, materials, operations or equipment. This document does not purport to address the safety problems associated with its use. It is the responsibility of the user of this document to establish proper safety and health practices, and determine the application of regulatory limitations prior to use. Poly(vinyl chloride) evolves hydrogen chloride on thermal decomposition and precautions should be taken to avoid inhalation of these or other fumes.

1 Scope

This document specifies three methods for the determination of the ash of poly(vinyl chloride).

The general procedures given in ISO 3451-1 are followed. For ash, method A is used. For sulfated ash, methods B and C are used. All three methods are applicable to resins, compounds and finished products. Methods B and C are applicable when lead-containing compounds are present.

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 3451-1, *Plastics — Determination of ash — Part 1: General methods*

ISO 11358-1, *Plastics — Thermogravimetry (TG) of polymers — Part 1: General principles*

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