ICS 83.080.01 SLOVENSKÁ TECHNICKÁ NORMA November 2025

| STN | **Plasty<br>Stanovenie látok extrahovateľných organickými rozpúšťadlami (bežné metódy)<br>(ISO 6427: 2025)** | **STN<br>EN ISO 6427<br><br>64 0236** |
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Plastics - Determination of matter extractable by organic solvents (conventional methods) (ISO 6427:2025)

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. 10/25

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Oznámením tejto normy sa ruší
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# EUROPEAN STANDARD
# NORME EUROPÉENNE
# EUROPÄISCHE NORM

# EN ISO 6427

July 2025

ICS 83.080.01 Supersedes EN ISO 6427:2014

English Version

## Plastics - Determination of matter extractable by organic solvents (conventional methods) (ISO 6427:2025)

Plastiques - Détermination des matières extractibles par des solvants organiques (Méthodes conventionnelles) (ISO 6427:2025)

Kunststoffe - Bestimmung der extrahierbaren Bestandteile durch organische Lösemittel (Standardverfahren) (ISO 6427:2025)

This European Standard was approved by CEN on 17 July 2025.

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**CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels**



Ref. No. EN ISO 6427:2025 E

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## European foreword

This document (EN ISO 6427:2025) 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of an identical text or by endorsement, at the latest by January 2026, and conflicting national standards shall be withdrawn at the latest by January 2026.

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 6427:2025 has been approved by CEN as EN ISO 6427:2025 without any modification.

International Standard

ISO 6427

# Plastics — Determination of matter extractable by organic solvents (conventional methods)

*Plastiques — Détermination des matières extractibles par des solvants organiques (Méthodes conventionnelles)*

Fourth edition
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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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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 fourth edition cancels and replaces the third edition (ISO 6427:2013), which has been technically revised.

The main changes are as follows:

— the mandatory terms and definitions clause (Clause 3) has been added, and subsequent clauses have been renumbered;

— tolerances of all relevant test parameters have been added;

— the test report has been updated.

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.

# Introduction

There are several very similar national and international standards for the determination of the percentage of extractable matter, with only slight differences in the procedures. To facilitate the work of the laboratory staff which has to carry out these determinations on various plastics products, the generally applicable methods are specified in this document.

**International Standard** **ISO 6427:2025(en)**

# Plastics — Determination of matter extractable by organic solvents (conventional methods)

## 1 Scope

This document specifies methods for the determination of components in plastics that can be extracted by hot organic liquids near their boiling points. It also specifies a special extraction method called cold-extraction.

The extractable components can be monomers, oligomers, polymers, plasticizers, stabilizers, etc. The kind and percentage of extractable matter influence the properties of plastics.

This document does not apply to plastics that come into contact with food or drinking water, because special regulations for those plastics are established in many countries. The methods of this document are not intended to be used for migration tests.

If this document is used to test plastics other than those mentioned in Table 1, the operating conditions are intended to be agreed upon by the interested parties.

## 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 308, *Plastics — Phenolic moulding materials — Determination of acetone-soluble matter (apparent resin content of material in the unmoulded state)*

ISO 383, *Laboratory glassware — Interchangeable conical ground joints*

ISO 565, *Test sieves — Metal wire cloth, perforated metal plate and electroformed sheet — Nominal sizes of openings*

ISO 1773, *Laboratory glassware — Narrow-necked boiling flasks*

ISO 1875, *Plastics — Plasticized cellulose acetate — Determination of matter extractable by diethyl ether*