

STN	Plasty Polyamidy Stanovenie ϵ-kaprolaktámu a ω-laurolaktámu plynovou chromatografiou (ISO 11337: 2023)	STN EN ISO 11337 64 0365
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Plastics - Polyamides - Determination of caprolactam and laurolactam by gas chromatography (ISO 11337:2023)

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. 04/23

Obsahuje: EN ISO 11337:2023, ISO 11337:2023

Oznámením tejto normy sa ruší
STN EN ISO 11337 (64 0365) z mája 2011

136660

EUROPEAN STANDARD

EN ISO 11337

NORME EUROPÉENNE

EUROPÄISCHE NORM

February 2023

ICS 83.080.20

Supersedes EN ISO 11337:2010

English Version

**Plastics - Polyamides - Determination of e-caprolactam
and ζ -lauro lactam by gas chromatography (ISO
11337:2023)**

Plastiques - Polyamides - Détermination du e-
caprolactame et du ζ -lauro lactame par
chromatographie en phase gazeuse (ISO 11337:2023)

Kunststoffe - Polyamide - Gaschromatographische
Bestimmung von e-Caprolactam und ζ -Lauro lactam
(ISO 11337:2023)

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EN ISO 11337:2023 (E)

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European foreword

This document (EN ISO 11337:2023) 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 NBN.

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of an identical text or by endorsement, at the latest by August 2023, and conflicting national standards shall be withdrawn at the latest by August 2023.

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 11337:2023 has been approved by CEN as EN ISO 11337:2023 without any modification.

INTERNATIONAL
STANDARD

ISO
11337

Third edition
2023-01

**Plastics — Polyamides —
Determination of ϵ -caprolactam and
 ω -lauro lactam by gas chromatography**

*Plastiques — Polyamides — Détermination du ϵ -caprolactame et du
 ω -lauro lactame par chromatographie en phase gazeuse*



Reference number
ISO 11337:2023(E)

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Published in Switzerland

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ISO 11337:2023(E)

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 61, *Plastics*, Subcommittee SC 9, *Thermoplastic materials*, 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 11337:2010), which has been technically revised.

The main changes are as follows:

- isopropanol has been added as suitable internal standard for method A;
- the use of packed and capillary columns has been indicated specifically;
- the specification of suitable detectors has been opened.

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.

Plastics — Polyamides — Determination of ϵ -caprolactam and ω -laurolactam by gas chromatography

SAFETY STATEMENT — Persons using this document should be familiar with normal laboratory practice, if applicable. This document does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.

1 Scope

This document specifies a method for determining ϵ -caprolactam and ω -laurolactam in polyamides by gas chromatography. It is applicable particularly to the determination of ϵ -caprolactam in polyamide 6 and ω -laurolactam in polyamide 12.

Two variants of the basic method are specified.

- Method A is an extraction method with boiling methanol, and the extract is injected into a gas chromatograph.
- Method B is a method using a solvent, and the solution is injected into a gas chromatograph.

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 amendment) applies.

ISO 472, *Plastics — Vocabulary*

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

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