## INTERNATIONAL STANDARD

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# Plastics — Polyamides — Determination of $\epsilon$ -caprolactam and $\omega$ -laurolactam by gas chromatography

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#### **Foreword**

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itee IS. ISO 11337 was prepared by Technical Committee ISO/TC 61, Plastics, Subcommittee SC 5, Physicalchemical properties.

### Plastics — Polyamides — Determination of $\epsilon$ -caprolactam and $\omega$ -laurolactam by gas chromatography

WARNING — This International Standard may involve hazardous chemicals, materials or operations. It does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user to establish appropriate safety and health practices and to determine the applicability of regulatory limitations prior to use.

#### 1 Scope

This International Standard specifies a method for determining  $\epsilon$ -caprolactam and  $\omega$ -laurolactam in polyamides by gas chromatography. It is suitable particularly for the determination of  $\epsilon$ -caprolactam in polyamide 6 and  $\omega$ -laurolactam in polyamide 12. Bearing in mind that gas chromatography offers a wide range of possible conditions, the method specified is that shown to have been suitable in practice.

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.

Method A is suitable for the determination of  $\epsilon$ -caprolactam and method B for  $\epsilon$ -caprolactam and  $\omega$ -laurolactam.

#### 2 Normative references

The following referenced documents are indispensable for the application 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 472, Plastics — Vocabulary

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

#### 3 Terms and definitions

For the purposes for this document, the terms and definitions given in ISO 472 apply.

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