

# DIN EN ISO 11337:2023-10 (E)

## Plastics - Polyamides - Determination of $\varepsilon$ -caprolactam and $\omega$ -laurolactam by gas chromatography (ISO 11337:2023)

---

### Contents

	Page
<b>European foreword</b>	3
<b>Foreword</b>	4
<b>1 Scope</b>	5
<b>2 Normative references</b>	5
<b>3 Terms and definitions</b>	5
<b>4 Method A: Extraction method</b>	5
4.1 Principle	5
4.2 Reagents	5
4.3 Apparatus and materials	6
4.4 Preparation of test sample	7
4.5 Procedure	8
4.5.1 Test portion	8
4.5.2 Extraction	8
4.5.3 Preparation of internal-standard solution	8
4.5.4 Preparation of sample solution	8
4.5.5 Preparation of calibration solution	8
4.5.6 Gas-chromatographic analysis of sample and calibration solutions	8
4.5.7 Evaluation of gas chromatographic peaks	9
4.6 Expression of results	9
4.7 Precision	9
4.8 Test report	10
<b>5 Method B: Dissolution method</b>	10
5.1 Principle	10
5.2 Reagents	10
5.3 Apparatus	11
5.4 Preparation of internal-standard solutions	12
5.4.1 General	12
5.4.2 Internal standard for unextracted polyamide 6	12
5.4.3 Internal standard for extracted polyamide 6	12
5.4.4 Internal standard for polyamide 12	12
5.4.5 Preparation of calibration solutions	13
5.4.6 Calibration	14
5.5 Procedure	14
5.5.1 Preparation and injection of sample solution	14
5.5.2 Evaluation of gas-chromatographic peaks	14
5.5.3 Solvent recovery	14
5.6 Expression of results	15
5.7 Precision	15
5.8 Test report	15