

ISO 11337:2023-01 (E)

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

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