

ISO 8124-6:2018 (E)

Safety of toys — Part 6: Certain phthalate esters in toys and children's products

Contents

	Foreword
	Introduction
1	Scope
2	Normative references
3	Terms and definitions
4	Principle
5	Reagents
6	Apparatus
7	Selection of test portion
8	Procedure
8.1	Sample weighing
8.2	Extraction
8.2.1	Options for extraction method
8.2.2	Method A
8.2.3	Method B
8.2.4	Method C
8.2.4.1	For material in solid form
8.2.4.2	For material in liquid form
8.3	Sample solution for analysis
8.3.1	General
8.3.2	Quantification by external standard (ES) calibration
8.3.2.1	Method A and Method B
8.3.2.2	Method C
8.3.2.2.1	Material in solid form
8.3.2.2.2	Material in liquid form
8.3.3	Quantification by IS calibration
8.4	Determination
8.4.1	GC-MS conditions
8.4.2	Identification
8.4.3	Calibration
8.4.3.1	General
8.4.3.2	External standard (ES) calibration
8.4.3.3	Internal standard (IS) calibration
9	Calculation
9.1	External standard (ES) calculation
9.2	Internal standard (IS) calculation
10	Quality control
10.1	Limit of quantification (LOQ)
10.2	Method blank
10.3	Recovery
10.4	Calibration check

11	Precision
12	Test report
Annex A	(normative) Phthalate esters
Annex B	(informative) Precision of the method
Annex C	(informative) Soxhlet extractor and solvent extractor
Annex D	(informative) Composite test
D.1	Introduction
D.2	Preparation of composite test portion
D.3	Test procedure
D.4	Calculation
D.5	Judgement for next action
D.6	Test report
D.7	Example
Annex E	(normative) Ultrasonic bath performance check
E.1	Overview
E.2	Principle
E.3	Apparatus
E.3.1	Aluminium foil
E.4	Procedure
E.5	Example
Annex F	(informative) Example of GC-MS conditions
Annex G	(informative) Background and rationale
G.1	Introduction
G.2	Other phthalate esters in toys and children's products
G.3	Sample preparation, extraction and determination methods
G.4	ES and IS calibration
G.5	Materials that may contain phthalate esters

Page count: 32