

ISO 787-28:2019 (E)

General methods of tests for pigments and extenders — Part 28: Determination of total content of polychlorinated biphenyls (PCB) by dissolution, cleanup and GC-MS

Contents

	Foreword
	Introduction
1	Scope
2	Normative references
3	Terms and definitions
4	Principle
5	Sampling
6	Procedure
6.1	General
6.2	Clean-up to eliminate interfering species
6.3	Separation and quantification
7	Reagents
7.1	Safety precautions
7.2	Reagents, solvents and absorbents
7.3	Internal reference materials for PCBs, ¹³ C ¹² -labelled
7.4	Cleaning/disposal agents
8	Apparatus
9	Procedure
9.1	Preparation of test sample
9.2	Liquid-liquid extraction
9.2.1	Separation funnel
9.2.2	Ludwig extraction
9.3	Clean-up
9.3.1	General
9.3.2	Diatomaceous earth-sulfuric acid column (optional)
9.3.2.1	Preparation of the column
9.3.2.2	Running the column
9.3.3	Gel permeation (size exclusion) chromatography/porous styrene divinylbenzene beads-column (optional)
9.3.3.1	Preparation of the column
9.3.3.2	Running the column
9.3.4	Multilayer columns (obligatory)
9.3.4.1	Preparation of a large-volume multilayer column
9.3.4.2	Running the large-volume multilayer column
9.3.4.3	Two-step wet column
9.3.4.3.1	Preparation of the column
9.3.4.3.2	Running the column
9.3.5	Alumina column (optional)
9.3.5.1	Preparation of the column
9.3.5.2	Running the column
9.4	Preparation of GC solution and GC procedure
9.5	Calculation and quantitation procedure

10 Test report

Annex A (informative) Nomenclature of PCBs

Page count: 21