
**Textiles — Determination of certain
flame retardants —**

**Part 1:
Brominated flame retardants**

*Textiles — Détermination de certains retardateurs de flamme —
Partie 1: Retardateurs de flamme bromés*

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Foreword

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The committee responsible for this document is ISO/TC 38, *Textiles*.

ISO 17881 consists of the following parts, under the general title *Textiles — Determination of certain flame retardants*:

- *Part 1: Brominated flame retardants*
- *Part 2: Phosphorus flame retardants*

Textiles — Determination of certain flame retardants —

Part 1: Brominated flame retardants

WARNING — This International Standard calls for the use of substances and/or procedures that may be injurious to health if adequate precautions are not taken. It refers only to technical suitability and does not absolve the user from legal obligations relating to health and safety at any stage. It has been assumed in the drafting of this International Standard that the execution of its provisions is entrusted to appropriately qualified and experienced people.

1 Scope

This part of ISO 17881 specifies a test method for determining some brominated flame retardants in textiles by gas chromatography – mass spectrometry (GC-MS).

The method is applicable to all kinds of textile products.

2 Principle

The flame retardants are extracted from textile specimen by ultrasonic generator with toluene. The flame retardants in the specimen are identified by GC-MS and quantified by using internal standard method.

3 Reagents

Unless otherwise specified, use only reagents of recognized analytical grade.

- 3.1 **Monobromobiphenyl (MonoBB)**, CAS no. 2052-07-5.
- 3.2 **Dibromobiphenyl (DiBB)**, CAS no. 57422-77-2.
- 3.3 **Tribromobiphenyl (TriBB)**, CAS no. 59080-34-1.
- 3.4 **Tetrabromobiphenyl (TetraBB)**, CAS no. 60044-24-8.
- 3.5 **Pentabromo-1,1'-biphenyl (PentaBB)**, CAS no. 59080-39-6.
- 3.6 **Hexabromobiphenyl (HexaBB)**, CAS no. 60044-26-0.
- 3.7 **Heptabromo-1,1'-biphenyl (HeptaBB)**, CAS no. 88700-06-5.
- 3.8 **Octabromobiphenyl (OctaBB)**, CAS no. 67889-00-3.
- 3.9 **Nonabromobiphenyl (NonaBB)**, CAS no. 69278-62-2.
- 3.10 **Decabromobiphenyl (DecaBB)**, CAS no. 13654-09-6.
- 3.11 **Tetrabromodiphenylether (TetraBDE)**, CAS no. 5436-43-1.