

Textiles and textile products - Determination of the content of compounds based on chlorobenzenes and chlorotoluenes

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>See Eesti standard EVS-EN 17137:2024 sisaldab Euroopa standardi EN 17137:2024 ingliskeelset teksti.</p> <p>Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.</p> <p>Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 06.11.2024.</p> <p>Standard on kättesaadav Eesti Standardimis- ja Akrediteerimiskeskusest.</p>	<p>This Estonian standard EVS-EN 17137:2024 consists of the English text of the European standard EN 17137:2024.</p> <p>This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation.</p> <p>Date of Availability of the European standard is 06.11.2024.</p> <p>The standard is available from the Estonian Centre for Standardisation and Accreditation.</p>
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English Version

Textiles and textile products - Determination of the content of compounds based on chlorobenzenes and chlorotoluenes

Textiles et produits textiles - Détermination de la teneur de composés à base de chlorobenzènes et chlorotoluènes

Textilien und textile Erzeugnisse - Bestimmung des Gehaltes von Verbindungen auf der Basis von Chlorbenzolen und Chlortoluolen

This European Standard was approved by CEN on 6 October 2024.

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European foreword

This document (EN 17137:2024) has been prepared by Technical Committee CEN/TC 248 “Textiles and textile products”, the secretariat of which is held by BSI.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by May 2025, and conflicting national standards shall be withdrawn at the latest by May 2025.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 17137:2018.

EN 17137:2024 includes the following significant technical changes with respect to EN 17137:2018:

- The clauses have been reorganised and renamed according to CEN/CENELEC Internal Regulations Part 3:2022;
- Clause 1: The scope has been extended to α -chlorinated toluenes and rephrased;
- Clause 2: EN ISO 4787 has been added;
- 3.1 and 3.2 have been deleted;
- Clause 4 has been rephrased;
- Clause 5 has been reorganised and rephrased;
- 5.2: Several α -chlorinated toluenes have been added in Table 1, and Table 1 has been reorganised;
- Clause 6 has been reorganised and rephrased;
- 6.6: Triple-quadrupole mass spectrometer has been added as a suitable detector;
- Clause 7 and Clause 8 have been reorganised and rephrased;
- 9.2: A clause on how to calculate the sum of chlorobenzenes and chlorotoluenes has been added;
- 9.3: The limit of quantification of the test method has been given;
- Clause 10 has been reorganised and rephrased;
- a new Annex A: with description on the occurrence of “false positives” has been added;
- a new Annex B with test procedure if “false positives” are suspected has been added;
- Annex C: Former Annex A has become Annex C;
- Table C.1: The description of the injection temperature has been amended;
- Table C.2: Examples of quantifier and qualifier ions have been revised and retention times have been removed;

- C.2: Instrumental conditions and characteristic masses for quantification with mass chromatograph/triple quad mass spectrometer (GC-MS/MS) have been added;
- Annex D: Former Annex B has become Annex D, has been revised and statistical data have been adopted from the reports on two proficiency tests by the Institute for Interlaboratory Studies;
- Bibliography: Further references have been added.

Any feedback and questions on this document should be directed to the users' national standards body. A complete listing of these bodies can be found on the CEN website.

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1 Scope

This document specifies a test method using gas chromatography with mass selective detector (GC-MS) for detection and quantification of chlorobenzenes, chlorotoluenes, and α -chlorinated toluenes in fibres, yarns, fabrics, coated fabrics and plastics.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN ISO 4787, *Laboratory glass and plastic ware — Volumetric instruments — Methods for testing of capacity and for use (ISO 4787)*

3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp/>
- IEC Electropedia: available at <https://www.electropedia.org/>

4 Principle

The sample is cut into small pieces and extracted with dichloromethane in a sealed vial at a defined temperature in an ultrasonic bath. An aliquot of the extract is analysed for the compounds listed in Table 1 using a GC-MS.

NOTE CEN/TR 16741 specifies which materials are applicable to this test method.

5 Reagents

Unless otherwise specified, all reagents shall be of a recognized analytical grade.

5.1 Dichloromethane, CAS Registry Number[®]1 (CAS RN[®]) 75-09-2.

5.2 Reference compounds.

Reference compounds are listed in Table 1.

Table 1 — Reference compounds

Compound number	Compound	CAS RN [®]
	Chlorobenzenes	
1	Chlorobenzene	108-90-7
2	1,2-Dichlorobenzene	95-50-1
3	1,3-Dichlorobenzene	541-73-1

¹ CAS Registry Number[®] (CAS RN[®]) is a trademark of the American Chemical Society (ACS). This information is given for the convenience of users of this document and does not constitute an endorsement by CEN of the product named. Equivalent products may be used if they can be shown to lead to the same results.