

Textiles and textile products - Determination of organotin compounds - Part 2: Direct method using liquid chromatography (ISO 22744-2:2020)

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN ISO 22744-2:2020 sisaldab Euroopa standardi EN ISO 22744-2:2020 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 22744-2:2020 consists of the English text of the European standard EN ISO 22744-2:2020.
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English Version

Textiles and textile products - Determination of organotin compounds - Part 2: Direct method using liquid chromatography (ISO 22744-2:2020)

Textiles et produits textiles - Détermination des composés organostanniques - Partie 2: Méthode directe utilisant la chromatographie en phase liquide (ISO 22744-2:2020)

Textilien und textile Erzeugnisse - Bestimmung von zinnorganischen Verbindungen - Teil 2: Direktes Verfahren mittels Flüssigkeitschromatographie (ISO 22744-2:2020)

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European foreword

This document (EN ISO 22744-2:2020) has been prepared by Technical Committee ISO/TC 38 "Textiles" in collaboration with 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of an identical text or by endorsement, at the latest by March 2021, and conflicting national standards shall be withdrawn at the latest by March 2021.

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.

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Endorsement notice

The text of ISO 22744-2:2020 has been approved by CEN as EN ISO 22744-2:2020 without any modification.

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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This document was prepared by Technical Committee ISO/TC 38, *Textiles*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 248, *Textiles and textile products*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

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Textiles and textile products — Determination of organotin compounds —

Part 2:

Direct method using liquid chromatography

WARNING — The use of this document involves hazardous materials. It does not purport to address all of the safety or environmental problems associated with its use. It is the responsibility of users of this document to take appropriate measures to ensure the safety and health of personnel and the environment prior to application of the document.

1 Scope

This document specifies a test method for the qualification and quantification of organotin compounds. This test method is applicable to all types of materials of textile products.

NOTE CEN/TR 16741 defines which materials are applicable to this determination.

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.

ISO 4787, *Laboratory glassware — Volumetric instruments — Methods for testing of capacity and for use*

3 Terms and definitions

No terms and definitions are listed in this document.

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

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

4 Principle

The organotin compounds are extracted from the material of a textile product with a methanol-ethanol mixture using tropolone as a complexing agent. The mono- and di-organotin-tropolone complexes and tri-organotin cations formed in the extraction procedure are directly analysed by a liquid chromatograph with a tandem mass spectrometer (LC-MS/MS). This method does not require additional derivatization step.

[Table 1](#) indicates the list of organotin compounds which can be analysed with this document.

This document is also applicable for further organotin compounds provided that the method is validated with the additional compounds.