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Textiles — Determination of deodorant property —

Part 4: Condensation sampling analysis

Textiles — Détermination des propriétés du déodorant —

Partie 4: Analyse par condensation d'échantillonnage

Reference number
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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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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT), see the following URL: Foreword — Supplementary information.

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

ISO 17299 consists of the following parts, under the general title of *Textiles — Determination of deodorant property*

— *Part 1: General principle*

— *Part 2: Detector tube method*

— *Part 3: Gas chromatography method*

— *Part 4: Condensation sampling analysis*

— *Part 5: Metal-oxide semiconductor sensors* method

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Introduction

This part of ISO 17299 describes condensation sampling analyses to measure the very low concentration of the odour chemicals which is assumed at the level of human olfactory perception threshold.

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Textiles — Determination of deodorant property —

Part 4: Condensation sampling analysis

1 Scope

This part of ISO 17299 specifies a deodorant testing method using analytical instruments after using condensation sampling methods for all textile products. This method is applicable to gaseous odour chemicals, such as indole, methyl mercaptan, hydrogen sulfide, isovaleric acid, and nonenal.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 17299-1, *Textiles — Determination of deodorant property — Part 1: General principle*

3 Terms and definitions

For the purpose of this document, the following terms and definitions apply.

3.1
condensation sampling
method for collecting gaseous odour chemicals at very low concentration levels, which are then condensed by analytical methods to higher concentration levels to facilitate detections of the chemicals

4 Principle

The concentration of a gaseous odour chemical in a container with or without a textile specimen after a designated elapsed time is measured by instrumental devices. The reduction rate of concentration of gaseous odour chemicals is calculated from the difference of average concentration data obtained from the container with specimen and from that without specimen. The test shall be done for each chemical individually.

5 Reagents

Unless otherwise specified, analytical grade reagents are used.

5.1 Ethanol, reagent with concentration of 99,5 %.

5.2 Odour chemicals.

5.2.1 Indole (C_8H_7N), reagent.

5.2.2 Methyl mercaptan, at a certified concentration of 2,0 µl/l ± 3 % in nitrogen diluent.

5.2.3 Hydrogen sulfide (H_2S), at a certified concentration of 2,0 µl/l ± 3 % in nitrogen diluent.

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