

BS ISO 17299-1:2014



BSI Standards Publication

Textiles — Determination of deodorant property

Part 1: General principle

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National foreword

This British Standard is the UK implementation of ISO 17299-1:2014.

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A list of organizations represented on this committee can be obtained on request to its secretary.

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Textiles — Determination of deodorant property —

Part 1: General principle

*Textiles — Détermination des propriétés de neutralisation d'odeurs —
Partie 1: Principe général*





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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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Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

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 *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*

Introduction

Unpleasant odours in daily human life are toilet odour, sweat odour, body odour (nonenal mixture odour), excrement odour, etc. Textile products that reduced these unpleasant odours from ambient air or around the human body were offered in the market by using advanced technology.

However, the evaluation method for such deodorant textiles did not develop as an International Standard. This fact has been making it difficult to evaluate correctly the deodorant property of the textile products for consumers as well as manufactures worldwide.

A current practical method for the evaluation of odour is a human sensory testing method in which a person is directly judged by the human sense of smell if there is an odour or not. This human sensory testing method is difficult to standardize as an objective indicator. Considering this situation, test methods using instruments or ultra-microanalysis testing methods have been developed.

Unpleasant odours are compounds of an infinitesimal quantity of chemicals. ISO 17299 provides a definition for the major component chemicals of odours and specifies the test methods by using several kinds of instruments in which the reduction rate of odour from ambient gas of the textile products is determined.

This part of ISO 17299 describes the general principle of testing methods for the deodorant property of textile products. Actual testing methods are described in ISO 17299-2 to ISO 17299-5.

Textiles — Determination of deodorant property —

Part 1: General principle

1 Scope

This part of ISO 17299 specifies the general principle of the deodorant textile products and deodorant testing methods for textile products, such as woven fabric, knit, nonwoven, fibres and yarns, braiding products, tapes and slings.

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 139, *Textiles — Standard atmospheres for conditioning and testing*

3 Terms and definitions

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

3.1 General

3.1.1

unpleasant odour

uncomfortable odour related to the human living environment, such as toilet odour, sweat odour, body odour (nonenal mixture odour), and excrement odour, etc.

3.1.2

major component chemicals of unpleasant odour

chemicals that compose the unpleasant odour in the living environment

Note 1 to entry: These chemicals are as follows:

- toilet odour: ammonia;
- sweat odour: ammonia, acetic acid, and isovaleric acid;
- body odour (nonenal mixture odour): ammonia, acetic acid, isovaleric acid, and nonenal;
- excrement odour: ammonia, acetic acid, hydrogen sulfide, methyl mercaptan, and indole.

Note 2 to entry: Other chemicals might be relevant. The selected chemicals are conceived as representative.

3.1.3

quasi-unpleasant odour

mixed odour produced artificially similar to unpleasant odour

Note 1 to entry: Mixed odours are produced artificially for the purpose of ISO 17299-5. The component chemicals for each odour are defined as follows:

- quasi-sweat odour: ammonia, acetic acid, isovaleric acid;