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ISO 16187

Footwear and footwear components — Test method to assess antibacterial activity

Chaussure et composants de chaussure — Méthode d'essai pour évaluer l'activité antibactérienne

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Foreword

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This document was prepared by Technical Committee ISO/TC 216, *Footwear*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 309, *Footwear,* in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This second edition cancels and replaces the first edition (ISO 16187:2013), which has been technically revised.

The main changes are as follows:

— a new term “neutralizer” and its definition have been added;

— a new Clause 4 has been added;

— AS No. has been revised to CGMCC No.;

— the light intensity of UV lamp has been added;

— the normative references and bibliography have been revised and updated;

— TSA and TSB have been added as alternative culture medium if NA and NB are not available;

— Annex D has been deleted.

Any feedback or questions on this document should be directed to the user’s national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

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Footwear and footwear components — Test method to assess antibacterial activity

CAUTION — Test methods specified in this document require the use of bacteria. These tests shall only be carried out in facilities with containment techniques for handling microorganisms and by persons with training and experience in the use of microbiological techniques.

1 Scope

This document specifies quantitative test methods to evaluate the antibacterial activity of footwear and footwear components.

This document is applicable to all types of footwear and footwear components employing non-diffusing antibacterial treatments.

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 7218, *Microbiology of the food chain — General requirements and guidance for microbiological examinations*

ISO 19952, *Footwear — Vocabulary*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 19952 and the following apply.

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/

3.1
antibacterial activity
efficacy of a material or finish used to prevent or mitigate the growth of bacteria, to reduce the number of bacteria or to kill bacteria

3.2
control sample
material identical to the test material but without antibacterial treatment

3.3
neutralizer
chemical agent used to inactivate, neutralize, or quench the antibacterial properties of antibacterial agents

4 Principle

The test specimens and control specimens are inoculated with a bacterial suspension of a selected test strain specified or claimed in independent tests with one Gram-positive and one Gram-negative bacterial test organism.

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