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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 44940-2024

**Footwear and footwear components - Qualitative test method to
assess antifungal activity(growth test)**

鞋类和鞋类部件 抗真菌性能定性评估试验方法（生长测试）

(English Translation)

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting is required.

This document is modified to adopt ISO 19574:2022 "Test methods for qualitative evaluation of the antifungal properties of footwear and footwear components (Growth test)".

The technical differences between this document and ISO 19574:2022 and their reasons are as follows.

-- The requirement that each microbial species should be tested individually (see Chapter 8 of ISO 19574:2022) has been deleted to maintain the integrity of the document.

The consistency of the document facilitates the correct use of the document;

--Added the description of the evaluation method when the sample observation evaluation level crosses adjacent levels (see Chapter 12), and further clarified the result processing way to facilitate the use of files.

The following editorial changes were made to this document.

-- The description of "filamentous" for fungi has been deleted (see Chapter 1 of ISO 19574:2022);

--Added instructions for using sterile qualitative filter paper as a control sample when there is no control sample (see 3.2);

-- The conversion relationship between centrifugal force and speed has been deleted (see 6.7 of ISO 19574:2022);

--Merge the two paragraphs in 7.2 into one paragraph (see 7.2 of ISO 19574:2022);

-- The Chemical Abstracts Number of the relevant reagents was deleted, and the trade name "TritonTM X-100" was deleted and replaced with the chemical name (see ISO 19574:2022, Chapter 7);

- Added instructions for use of wetting agents on hydrophobic materials (see 7.5);
- The trademark of the test strain and footnote c in Table 1 have been deleted (see Chapter 8 of ISO 19574:2022);
- The informative reference to EN 12353 has been deleted (see Chapter 8 of ISO 19574:2022).

1 Scope

This document describes a test method for the qualitative evaluation of the antifungal properties of footwear and footwear components exposed to fungal attack (biosafety).

long test).

This document applies only to footwear and footwear components claiming to have antifungal or antimicrobial effects.

2 Normative references

The contents of the following documents constitute the essential clauses of this document through normative references in this document.

For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies to this document.

ISO 7218 Microbiology of food and animal feeding stuffs - General requirements and guidance for microbiological examination and animal feeding stuffs-General requirements and guidance for microbiological examinations) ISO 11133 Preparation, production, storage and performance testing of microbiological culture media for food, animal feed and water (Microbiology of food, animal feed and water-Preparation, production, storage and performance testing of culture media ISO 16187 Test methods for evaluation of the antibacterial properties of footwear and footwear components Test method to assess antibacterial activity) Note. GB/T 38017-2019 Test method for evaluation of antibacterial performance of footwear and footwear components (ISO 16187:2013, IDT) ISO.19952 Footwear-Vocabulary Note. GB/T 2703-2017 Footwear Terminology (ISO.19952.2005, NEQ)

3 Terms and definitions

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

The terminology databases maintained by ISO and IEC for standardization are located at.

Antifungal activity; antimycotic activity the efficacy of a material or product to prevent or

slow the growth of fungi, reduce the number of fungi or kill fungi.

Control specimen

Samples made of the same material as the test material, but without antifungal treatment.

Note: If no control sample is available, sterile qualitative filter paper can be used as a control sample.