

BS ISO 13629-2:2014



BSI Standards Publication

Textiles — Determination of antifungal activity of textile products

Part 2: Plate count method

bsi.

...making excellence a habit.
AVA Documents™
Document Sharing Hub

National foreword

This British Standard is the UK implementation of ISO 13629-2:2014.

The UK participation in its preparation was entrusted to Technical Committee TCI/80, Chemical testing of textiles.

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

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

© The British Standards Institution 2014.
Published by BSI Standards Limited 2014

ISBN 978 0 580 80749 7
ICS 59.080.01

Compliance with a British Standard cannot confer immunity from legal obligations.

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 31 July 2014.

Amendments/corrigenda issued since publication

Date	Text affected
------	---------------

INTERNATIONAL STANDARD

ISO
13629-2

First edition
2014-06-15

Textiles — Determination of antifungal activity of textile products —

Part 2: Plate count method

*Textiles — Détermination de l'activité antifongique des produits
textiles —*

Partie 2: Méthode par dénombrement sur plaque de gélose



Reference number
ISO 13629-2:2014(E)

AVA Documents
Document Sharing Hub
© ISO 2014



COPYRIGHT PROTECTED DOCUMENT

© ISO 2014

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

Contents

Page

Foreword	iv
Introduction	v
1 Scope	1
2 Normative reference	1
3 Terms and definitions	1
4 Principle	2
5 Safety precaution	2
6 Reference fungi	2
7 Apparatus	2
8 Reagents and culture media	4
8.1 Pure water	4
8.2 Anionic surfactant	4
8.3 Culture medium	4
9 Fungi preservation and use	6
10 Spore suspension	6
10.1 General	6
10.2 Suspending spores in culture media	7
10.3 Collection and dispersion of spore suspension from a culture medium	7
10.4 Filtering to remove hyphae and spore thread	7
10.5 Using centrifuge and re-suspension to remove supernatant	7
10.6 Confirming the concentration of spore suspension	8
10.7 Adjusting spore suspension for testing	8
10.8 Enumeration of inoculum	8
11 Testing procedure	8
11.1 Inoculation and preparation of specimens	8
11.2 Plate count method procedure	11
12 Test results	13
12.1 Judgment of test effectiveness	13
12.2 Calculation of antifungal activity value	13
13 Test report	14
Annex A (normative) Fungi used in this part of ISO 13629	15
Annex B (informative) Antifungal efficacy	16
Bibliography	17

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).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

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 13629 consists of the following parts, under the general title *Textiles — Determination of antifungal activity of textile products*:

- *Part 1: Luminescence method*
- *Part 2: Plate count method*

Introduction

This part of ISO 13629 adopts the plate count method as a basis of quantitative determination of antifungal activity.

The following are characteristics of the plate count method:

- conventional method which is easy to operate in bacteriological laboratories;
- no need to use special apparatus such as a lumino photometer;
- long history and common procedure.

Textiles — Determination of antifungal activity of textile products —

Part 2: Plate count method

1 Scope

This part of ISO 13629 specifies a test method for quantitative determination of antifungal activity by plate count method.

This part of ISO 13629 is applicable to various kinds of textile products such as fibres, yarns, fabrics, clothing, bedclothes, home furnishings, and other miscellaneous goods.

2 Normative reference

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 105-F02, *Textiles — Tests for colour fastness — Part F02: Specification for cotton and viscose adjacent fabrics*

ISO 7218, *Microbiology of food and animal feeding stuffs — General requirements and guidance for microbiological examinations*

3 Terms and definitions

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

3.1

control fabric

fabric used to validate the growth condition of test fungi

Note 1 to entry: Control specimens are sampled from the control fabric.

Note 2 to entry: The control fabric may be the same fabric as the fabric to be tested but without antifungal treatment. If this is not available, a 100 % cotton fabric without fluorescent brighteners or other finish, complying with the requirements of ISO 105-F02, is used as control fabric, after washing at the temperature of 60 °C without detergents or any brighteners, with mechanical agitation and rinsing.

3.2

antifungal agent

chemical agent to prevent or mitigate the growth of fungi or to reduce the number of fungi

3.3

antifungal treatment

treatment to prevent or mitigate the growth of fungi or to reduce the number of fungi

3.4

spore suspension

liquid with evenly dispersed fungal spores in sterilized water containing an anionic surfactant