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Textiles — Determination of antibacterial activity of textile products

Textiles — Détermination de l'activité antibactérienne des produits textiles



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Foreword

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

This second edition cancels and replaces the first edition (ISO 20743:2007), which has been technically revised.

Introduction

Speciality products of antibacterial-treated textiles have been introduced in the market and are expanding year by year in various applications. Those textiles certainly meet the consumer's requirement to seek prevention and protection from the negative effects caused by bacteria and to secure the quality of life.

In this situation, the test methods to determine the antibacterial activity for antibacterial textile products were expected to be established in order to address the substantial need for an International Standard.

The test method for antibacterial activity was developed as ISO 20645 which was a qualitative test method. There are no testing standards for the quantitative method which gives more objective information for the antibacterial activity of the textile products.

There are several practical test methods to determine the quantitative antibacterial activity specified in this International Standard. The test methods are composed of 2 major steps, such as inoculation of bacteria and quantitative measurement of bacteria.

The methods for the inoculation of bacteria specified in this International Standard are the absorption method, transfer method and printing method.

The methods of the quantitative measurement of bacteria specified in this International Standard are colony plate count method and ATP luminescence methods.

Although there are 6 ways for the combination of inoculation methods and quantitative measurements to execute this test, the choice of the ways depends on the user's availability and consensus between the concerned parties.