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antibacterial activity and efficacy of  
textile products**

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In the event of any doubts arising as to the contents,  
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## **Foreword**

This translation has been made based on the original Japanese Industrial Standard revised by the Minister of Economy, Trade and Industry through deliberations at the Japanese Industrial Standards Committee according to the proposal for revision of Japanese Industrial Standard submitted by Japan Textile Evaluation Technology Council (JTETC)/Japanese Standards Association (JSA) with the draft being attached, based on the provision of Article 12 Clause 1 of the Industrial Standardization Law. Consequently **JIS L 1902:2008** has been withdrawn and partially replaced with this Standard.

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# Textiles—Determination of antibacterial activity and efficacy of textile products

## Introduction

This Japanese Industrial Standard has been prepared based on the second edition of **ISO 20743** published in 2013 with some modifications of the technical contents to correspond to technical trend and actual situation in Japan.

The portions given sidelines or dotted underlines are the matters in which the contents of the corresponding International Standard have been modified. A list of modifications with the explanations is given in Annex JB. Testing examples are given in Annex E.

The matters contained in Annex JA are unique contents of JIS that are not given in the corresponding International Standard.

## 1 Scope

This Standard specifies quantitative and qualitative test methods to determine the antibacterial activity of all antibacterial textile products including nonwovens and antibacterial efficacy.

This Standard is applicable to all textile products, including cloth, wadding, thread and material for clothing, bedclothes, home furnishings and miscellaneous goods, regardless of the type of antibacterial agent used (organic, inorganic, natural or man-made) or the method of application (built-in, after-treatment or grafting).

Based on the intended application and on the environment in which the textile product is to be used and also on the surface properties of the textile properties, the user can select the most suitable of the following four determination methods on determination of antibacterial activity.

- a) **Absorption method** An evaluation method in which test bacterial suspension is inoculated directly onto the specimens.
- b) **Transfer method** An evaluation method in which test bacteria are placed on an agar plate and transferred onto the specimens.
- c) **Printing method** An evaluation method in which test bacteria are placed on a filter and printed onto specimens.
- d) **Halo method** A qualitative method to evaluate by the existence of halo.

The colony plate count method and the ATP (ATP = Adenosine Tri-phosphate) luminescence method are also specified for measuring the enumeration of bacteria.

The evaluation of photocatalytic antibacterial efficacy treated on the photocatalytic finished textile product shall be carried out according to **JIS R 1702**.

NOTE : The International Standard corresponding to this Standard and the symbol of degree of correspondence are as follows.