# INTERNATIONAL STANDARD

ISO 22196

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## Plastics — Measurement of antibacterial activity on plastics surfaces

Plastiques — Mesurage de l'action antibactérienne sur les surfaces en plastique

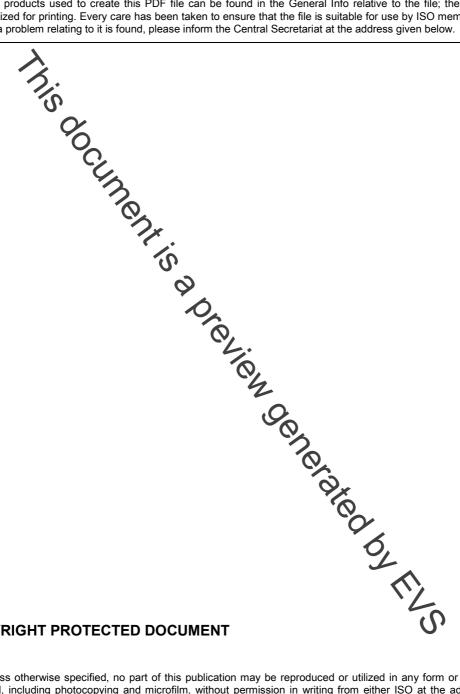


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### **Foreword**

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 Maison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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.

ISO 22196 was prepared by Technical Committee ISO/TC 61, Plastics, Subcommittee SC 6, Ageing, chemical and environmental resistance.

### Plastics — Measurement of antibacterial activity on plastics surfaces

### 1 Scope

WARNING — Handing and manipulation of microorganisms which are potentially hazardous requires a high degree of technical competence and may be subject to current national legislation and regulations. Only personnel trained in microbiological techniques should carry out such tests. Appropriate practices for disinfection, sterilization and personal hygiene must be strictly observed.

This International Standard specifies a method of evaluating the antibacterial activity of antibacterial-treated plastic products (including interprediate products).

NOTE It may also be suitable for other non-porous materials.

It is not intended to be used to evaluate the effects and propagation of bacteria on plastics without antibacterial treatments. ISO 846 [6] describes tests to evaluate the effects and propagation of bacteria on plastics, which are different from those covered by this International Standard. Those who are interested are referred to ISO 846:1997, method C.

Secondary effects of antibacterial treatments, such as the prevention of biodeterioration and odour, are not covered by this International Standard, which is not intended to be used or referenced as a method to document or claim biodegradability of plastics. For biodegradation, refer to ISO 14851, ISO 14852 and ISO 14855 (see the Bibliography) and related standards.

This International Standard does not concern plastic building materials, such as PVC or composites, unless they act in the same way as treated articles.

Any results obtained with this International Standard should always refer to this standard and the conditions used. Results obtained with this International Standard indicate antibacterial activity under the specified experimental conditions used herein, and do not reflect activity under other circumstances where a variety of factors, such as temperature, humidity, different bacterial species nutrient conditions, etc., have to be considered. A minimum diffusion of the antibacterial agents/chemicals into the test inoculum is necessary with this procedure.

It is recommended that workers consult ISO 7218.

### 2 Normative references

The following referenced documents are indispensable for the application 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 food and animal feeding stuffs — General requirements and guidance for microbiological examinations

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