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# Geotextiles and geotextile-related products — Determination of the characteristic opening size

*Géotextiles et produits apparentés — Détermination de l'ouverture de filtration caractéristique*

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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 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).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 221, *Geosynthetics*.

This third edition cancels and replaces the second edition (ISO 12956:2010), which has been technically revised. The main changes compared to the previous edition are as follows:

— the average used in order to select the number of specimens is modified (25 % to 15 %);

— explanations are given for the preparation of knitted tubular geotextiles.

Any feedback or questions on this document should be directed to the user’s national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.


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# Geotextiles and geotextile-related products — Determination of the characteristic opening size

**IMPORTANT — The electronic file of this document contains colours which are considered to be useful for the correct understanding of the document. Users should therefore consider printing this document using a colour printer.**

## 1 Scope

This document specifies a method for the determination of the characteristic size of the openings of a single layer of a geotextile or geotextile-related product using the wet-sieving principle.

## 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 9862, *Geosynthetics — Sampling and preparation of test specimens*

ISO 10320, *Geosynthetics — Identification on site*

## 3 Terms and definitions

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

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at http://www.electropedia.org/

**3.1**
$d_n$
particle size for which $n$ % mass fraction is smaller than the mass of measured particles

**3.2**
$O_{90}$
size of opening which is equal to the particle of size $d_{90}$ of the granular material which passes through the geotextile or geotextile-related product, expressed in µm

**3.3**
$C_u$
coefficient of uniformity, defined as $d_{60}/d_{10}$

## 4 Principle

The principle of the test is to determine the opening size ($O_{90}$) which corresponds to the specified size of the granular material passed.

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