

Publication of a New ISO Standard for Antibacterial Textiles

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A new nano-standard entitled “Nanotechnologies — Evaluation of the Antimicrobial Performance of Textiles Containing Manufactured Nanomaterials” was published in October 2021 by ISO.

The recent international standard for nanotechnology, “[Nanotechnologies — Evaluation of the Antimicrobial Performance of Textiles Containing Manufactured Nanomaterials](#),” describes the method employed for assessing the antibacterial performance of textiles comprising manufactured nanomaterials (metal or metal oxide).

Textiles in this standard include fabrics, yarns, and fibers in which nanomaterials made during the manufacturing or polishing process are used. In addition, the standard specifies the protocols required to quantify nanomaterials released from textiles after washing or exposure to artificial sweat from the human body.

This standard includes methods for evaluating antibacterial, antifungal, and antiperspirant functions, but it does not encompass textiles for therapeutic use, environment, health, and safety (EHS) aspects, the release of nanomaterials due to erosion, abrasion, or scratches.

The development of this standard was proposed by [Iran](#) Nanotechnology Innovation Council ([INIC](#)) in 2019 to the International Organization for Standardization ([ISO](#)). In order to persuade international experts as representatives of ISO member countries, various extensive studies, as well as numerous face-to-face and virtual meetings, were conducted with experts from different countries. Finally, upon the approval of the ISO Technical Committee for Nanotechnology ([ISO/TC 229](#)), the standard was publicized in October 2021.

The development of international standards usually takes 3 to 4 years. The basis for the development of international standards in the ISO is a global consensus by the member

countries. The member countries of the technical committees provide different expert opinions as for the completion and development of the standard at different stages of standardization. Currently, there are 39 countries as participating members and 18 countries as observing members in ISO Nanotechnology Standards Technical Committee.

Read the [original article](#) on INIC.