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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 17639-2023

Replacing GB/T 17639-2008

**Geosynthetics - Synthetic filament spunbond and
needlepunched nonwoven geotextiles**

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Foreword

This document is in accordance with the provisions of GB/T 1:1-2020 "Guidelines for Standardization Work Part 1: Structure and Drafting Rules for Standardization Documents" drafting: This document replaces GB/T 17639-2008 "Geosynthetic filament spunbonded needle-punched nonwoven geotextiles", and GB/T 17639- Compared with:2008, except for structural adjustment and editorial changes, the main technical changes are as follows:

- a) The types of raw materials are specified in the scope (see Chapter 1, Chapter 1 of the:2008 edition);
- b) Added a chapter on terms and definitions (see Chapter 3);
- c) The product classification is divided into polyester and polypropylene according to the raw materials: The types of fibers such as nylon and polyethylene are deleted, and the words "will be divided according to the structure" are deleted: Divided into common type and composite type" (see 4:1, 3:1 of the:2008 edition);
- d) The recommended specifications for polyester products have been changed, and the recommended specifications for polypropylene products have been added (see 4:2, 3:2 of the:2008 edition);
- e) Thickness is added to the product code (see 4:3, 3:3 of the:2008 edition);
- f) For the basic technical requirements of polyester filament spunbonded needle-punched nonwoven geotextiles, "nominal breaking strength" is changed to "nominal strength", and The index specification has been changed; "longitudinal and transverse fracture strength" has been changed to "longitudinal and transverse tensile strength", and the index requirements have been adjusted; "longitudinal and transverse Elongation corresponding to quasi-strength" was changed to "elongation under maximum longitudinal and transverse loads", and the index requirements were adjusted; CBR bursting strength and Minor adjustments have been made to the index requirements for longitudinal and transverse tear

strength; the thickness index has been deleted; the thickness deviation rate and thickness variation have been added Coefficient of 2 assessment indicators; increased dynamic perforation, longitudinal and transverse fracture strength (grab sample method), anti-ultraviolet performance (xenon arc lamp method), anti-corrosion Four reference indexes of ultraviolet performance (fluorescent ultraviolet lamp method) (see Table 1, Table 1 of the:2008 edition);

g) Added the basic technical requirements for polypropylene filament spunbonded needle-punched nonwoven geotextiles (see Table 2);

h) The assessment of broken needle residues has been added to appearance defects (see Table 3, Table 2 of the:2008 edition);

i) The corresponding test methods have been adjusted according to the changes in the technical requirements for intrinsic quality and appearance quality (see Chapter 6, Section 5 of the:2008 edition chapter);

j) Added factory inspection, type inspection and inspection items (see 7:1:1, 7:1:2 and 7:2): Please note that some contents of this document may refer to patents: The issuing agency of this document assumes no responsibility for identifying patents: This document is proposed by China National Textile and Apparel Council: This document is under the jurisdiction of the National Textile Standardization Technical Committee (SAC/TC209): This document is drafted by: China Textile Standard Inspection and Certification Co., Ltd., Weifang Tuowang Industrial Co., Ltd., Tiandingfeng Holdings Co., Ltd., Sinopec (Beijing) Chemical Research Institute Co., Ltd., Shanghai Survey and Design Research Institute Co., Ltd., Yunnan Zhongchi Engineering Materials Co., Ltd., Shandong Luther New Materials Co., Ltd., Hongxiang New Materials Co., Ltd., Shandong Crystal Innovation Material Technology Co., Ltd., Shandong Chenghuijin Industry Co., Ltd., Jiangsu Hangao Derui Industrial Co., Ltd., Guizhou Longxiang New Materials Co., Ltd., Shandong Taiwei Engineering Materials Co., Ltd., Tian Jinjianchang Environmental Protection Co., Ltd., Zhongcheng Jianshengyi (Shenzhen) Environmental Technology Co., Ltd., Jiangsu Jinyongda Industrial Co., Ltd., Taian Modern Plastics Co., Ltd., Feicheng Lianyi Engineering Plastics Co., Ltd., Shandong Dexuda Geotechnical Materials Co., Ltd., Anhui Zhonglu Engineering Materials Co., Ltd: Division, China Industrial Textiles Industry Association: The main drafters of this document: Liu Feifei, Ding Jinhai, Zhang Pengcheng, Zheng Haigang, Nie Songlin, Gao Shoufu, Du Xianjun, Liang Xunmei, Cui Zhanming, Feng Zhongchao, Shao Maogen, Lu Jiansong, Yu Haigang, Zhang Gensheng, Xiao Guangting, Chen Ximing, Wang Dunsheng, Zhang Tao, Huang Jingying, Gao Yuqing, Cheng Wei: The release status of previous versions of this document and the documents it replaces are as follows:

--- First published as GB/T 17639-1998 in:1998, first revised in:2008;

--- This is the second revision: Geosynthetics Filament Spunbonded Needle punched Nonwoven Geotextiles

1 Scope

GB/T 17639-2023 is the Chinese national standard on geosynthetics - synthetic filament spunbond and needlepunched nonwoven geotextiles, in the field of textile and leather technology. The /T suffix marks it as a recommended standard: it is not compulsory by itself, but it becomes binding as soon as a contract, a tender or a customer specification calls it up - which in practice is how most foreign buyers meet it. It was issued on 23 May 2023 by the State Administration for Market Regulation; Standardization Administration of China, and has been in force since 1 December 2023. Classification: ICS 59.080.70, CCS W59. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This document specifies the product classification, specifications, codes, technical requirements, test methods, inspection rules, Packaging, storage and labeling: This document is applicable to filament spunbonded needle-punched nonwoven fabrics made of polyester or polypropylene through spinning, laying, and needle-punching reinforcement:

2 Normative references

The contents of the following documents constitute the essential provisions of this document through normative references in the text: Among them, dated references For documents, only the version corresponding to the date is applicable to this document; for undated reference documents, the latest version (including all amendments) is applicable to this document: GB/T 3923:

1 Tensile properties of textile fabrics - Part 1: Determination of breaking strength and elongation at break (strip method)

GB/T 4666 Determination of length and width of textile fabrics

GB/T 13759 Geosynthetics Terms and Definitions

GB/T 13760 Geosynthetics Sampling and Sample Preparation GB/T 13761:

1 Determination of thickness of geosynthetics under specified pressure - Part 1: Single layer products

GB/T 13762 Method for determination of mass per unit area of geosynthetics geotextiles and geotextile related products

GB/T 13763 Determination of tear strength of geosynthetics by trapezoidal method

GB/T 14799 Determination of effective pore size of geotextiles and related products Dry sieving method

GB/T 14800 Geosynthetics Static Burst Test (CBR Method)

GB/T 15788 Geosynthetics Wide Strip Tensile Test Method

GB/T 15789 Determination of vertical permeability characteristics of geotextiles and related products under no load GB/T 16422:

2 Plastic laboratory light source exposure test method Part 2: Xenon arc lamp GB/T 16422:

3 Laboratory light source exposure test methods for plastics - Part 3: Fluorescent ultraviolet lamps