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

GB/T 17643-2025

Replacing GB/T 17643-2011

Geosynthetics - Polyethylene geomembrane

土工合成材料 聚乙烯土工膜

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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 17643-2011 "Geosynthetics Polyethylene Geomembrane". Compared with GB/T 17643-2011, In addition to structural adjustments and editorial changes, the main technical changes are as follows:

--- Added the scope of application of polyethylene geomembrane (see Chapter 1, Chapter 1 of the.2011 edition);

--- Changed the terms and definitions of geomembranes (see 3.1, 3.1 of the.2011 edition);

--- Added the terms and definitions of polyethylene geomembrane (see 3.2);

--- Deleted high-density polyethylene geomembrane, low-density polyethylene geomembrane, linear low-density polyethylene geomembrane, tensile yield strength, yield strength Terms and definitions of elongation, tensile strength at break, elongation at break, right-angle tear load, and 2% secant modulus (see.2011 edition 3.4, 3.5, 3.6, 3.7, 3.8, 3.9, 3.10, 3.11, 3.13);

--- Changed the density of basic raw materials (see Table 1, 4.1 of the.2011 edition);

--- Added the provisions for the basic raw materials of environmentally friendly high-density

polyethylene geomembrane (see 4.2);

--- Changed the requirements for the use of recycled materials (see 4.3,

4.2 of the.2011 edition);

--- Deleted the main raw materials in the classification and code table (see Table 1 of the.2011 edition);

--- Change the product width and product thickness in the name to product specifications (see 5.2,

1 Scope

GB/T 17643-2025 is the Chinese national standard on geosynthetics - polyethylene geomembrane, in the field of rubber and plastic industries. 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 25 April 2025 by the State Administration for Market Regulation; Standardization Administration of China, and has been in force since 1 November 2025. Classification: ICS 83.140.10, CCS G33. 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 basic raw materials, product classification and code and naming, technical requirements, inspection rules and marking, packaging and Packaging, storage and transportation, and describes the test methods. This document is applicable to products made of polyethylene resin as the basic raw material and with additives added in water conservancy and hydropower, transportation, animal husbandry, municipal engineering, etc. Production, inspection and sales of polyethylene geomembranes used in waterproofing and anti-seepage projects such as engineering, metallurgy and mining, solid waste treatment, landfill, petrochemical industry, etc.

2 Normative references

The contents of the following documents constitute essential clauses of this document through normative references in this document. For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies to This document.

GB/T 1033.2 Plastics - Determination of density of non-cellular plastics - Part

3 Terms and definitions

The terms and definitions defined in GB/T 2035 and the following apply to this document.

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