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

GB/T 10002.1-2023

Replacing GB/T 10002.1-2006

**Unplasticized poly (vinyl chloride) (PVC-U) pipes for water
supply**

给水用硬聚氯乙烯 (PVC-U) 管材

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part

1. Structure and Drafting Rules of Standardization Documents" Drafting. This document is Part 1 of GB/T 10002. GB/T 10002 has released the following parts.

1. Rigid polyvinyl chloride (PVC-U) pipes for water supply;

2. Rigid polyvinyl chloride (PVC-U) pipe fittings for water supply;

3. Rigid polyvinyl chloride (PVC-U) valves for water supply. This document replaces GB/T 10002.1-2006 "Hard polyvinyl chloride (PVC-U) pipes for water supply" and is consistent with GB/T 10002.1-2006. In addition to structural adjustments and editorial changes, the main technical changes are as follows:

a) Changed the scope and added application to pressure drainage pipeline systems (see Chapter 1, Chapter 1 of the 2006 edition);

b) Changes in terms and definitions (see Chapter 3, Chapter 3 of the 2006 edition);

c) Added the recommended performance of the compound (see 4.1), changed the K value requirements of PVC resin (see 4.2,

4.2 of the 2006 edition), The requirements for the use of cleaning recycled materials have been changed (see 4.4, 2006 version of 4.4), and the requirements for elastic sealing rings have been changed (see 4.6, Appendix C,

6.7 of the 2006 edition);

d) The nominal outer diameter range of pipes has been increased, and the outer diameter

has been expanded to 1200mm (see 6.3.1);

e) The requirements for wall thickness and allowable deviation at any point have been changed (see 6.3.2,

6.4.4.1 of the 2006 edition);

f) The requirements for average wall thickness and allowable deviation of pipes are deleted (see

1 Scope

GB/T 10002.1-2023 is the Chinese national standard on unplasticized poly (vinyl chloride) (PVC-U) pipes for water supply, 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 7 September 2023 by the State Administration for Market Regulation; Standardization Administration of China, and has been in force since 1 April 2024. Classification: ICS 83.140.30, 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 extrusion molding of rigid polyvinyl chloride (PVC-U) pipes for water supply using rigid polyvinyl chloride (PVC-U) compounding ingredients. Materials, product classifications, appearance, colors, specifications, physical and mechanical properties, hydrostatic strength, hygiene and systems of pipes (hereinafter referred to as "pipes") Applicability and other requirements, describe the corresponding test methods, and stipulate inspection rules, marking, transportation, and storage content. This document is applicable to rigid polyvinyl chloride (PVC-U) pipe systems for underground water supply in buildings or outdoors with water temperatures not exceeding 45°C, including General purpose pressure water transmission and drinking water distribution, also suitable for the production, inspection and sales of pressure drainage pipeline systems. Note

1. See Appendix A for the pressure reduction coefficient for operating temperatures between 0°C and 45°C. Note

2. The purchaser is responsible for appropriately selecting the products specified in this document based on its specific application needs and in conjunction with relevant regulations, standards or specifications.

2 Normative reference documents

The contents of the following documents constitute essential provisions of this document

through normative references in the text. Among them, the dated quotations For undated referenced documents, only the version corresponding to that date applies to this document; for undated referenced documents, the latest version (including all amendments) applies to this document.

GB/T 1033.1 Determination of density of plastic non-foam plastics Part

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