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

GB/T 18477.3-2019

Replacing GB/T 18477.3-2009

**Unplasticized polyvinyl chloride (PVC-U) structure wall pipeline
system for underground soil waste and drainage - Part 3: Axial
hollow-wall construction pipes**

埋地排水用硬聚氯乙烯（PVC-U）结构壁管道系统 第3部分：轴向中空壁管材

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Foreword

GB/T 18477 "Hard Polyvinyl Chloride (PVC-U) Structural Wall Pipe System for Buried Drainage" is divided into three parts.

--- Part 1. Double wall corrugated pipe;

--- Part 2. Reinforced pipe;

--- Part 3. Axial hollow wall pipe. This part is the third part of GB/T 18477. This part is drafted in accordance with the rules given in GB/T 1.1-2009. This part replaces GB/T 18477.3-2009 "Pneumatic Polyvinyl Chloride (PVC-U) Structural Wall Pipe System for Buried Drainage Part 3. Double-layer axial hollow-wall pipe, compared with GB/T 18477.3-2009, the main technical changes are as follows:

--- Increased farmland irrigation projects with a nominal pressure of $\leq 0.2\text{MPa}$ (see Chapter 1);

--- Added some "terms and definitions, symbols" (see Chapter 3);

--- Increased SN10 ring stiffness rating (see 5.1);

--- Increased pipe classification by lead limit (see 5.2);

--- Increased pipe classification by pressure (see 5.3);

5.2 mark" to Chapter 10 of this section (see 10.1,

5.2 of the.2009 edition);

--- Added solvent bonding, elastic sealing ring and steel skeleton integrated sealing ring and Huff connection (see 6.2);

--- Increase the size of the pipe; increase the minimum depth of the solvent-bonded joint and the average inner diameter of the middle of the socket and the cavity wall of the socket Thick requirements; modified requirements for the size of the elastomeric seal socket (see 7.2.2);

--- Increased the requirement for out-of-roundness (see 7.2.3);

1 Scope

GB/T 18477.3-2019 is the Chinese national standard on unplasticized polyvinyl chloride (PVC-U) structure wall pipeline system for underground soil waste and drainage - part 3: axial hollow-wall construction pipes, 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 30 August 2019 by the State Administration for Market Regulation; Standardization Administration of China, and has been in force since 1 March 2020. 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 part of GB/T 18477 specifies the rigid hollow-walled pipe (hereinafter referred to as pipe) for buried polyvinyl chloride (PVC-U). Terms and definitions, symbols, materials, classifications, structural types and connections, requirements, test methods, inspection rules and markings, transportation, storage. This section applies to polyvinyl chloride (PVC) resin as the main raw material, extruded municipal engineering, public buildings, outdoor, small residential Buried sewage, drainage, buried non-pressure farmland irrigation pipe, and farmland irrigation project with nominal pressure less than or equal to 0.2MPa Pipe.

Note. If the pipe is used for industrial sewage and drainage, the chemical resistance of the pipe is evaluated in ISO 4433-1 and ISO 4433-3.

2 Normative references

The following documents are indispensable for the application of this document. For dated references, only dated versions apply to this article. Pieces. For undated references, the latest edition (including all amendments) applies to this document. Plastics -- Determination of density of non-foam plastics -- Part 1 . Dipping method, liquid pycnometer method and titration method

GB/T 2828.1. Sampling procedures for sampling by sampling - Part 1 . Batch-to-batch sampling plan, searched by AQL Standard environment for

GB/T 2918 plastic sample conditioning and testing

GB/T 6111 Determination of internal pressure resistance of thermoplastic piping systems for fluid transport

GB/T 6671-2001 Determination of longitudinal shrinkage of thermoplastic pipes

GB/T 8806 Plastic pipe system - Determination of dimensions of plastic parts

GB/T 9647 Determination of the stiffness of thermoplastic pipe rings

GB/T 14152 Thermoplastics pipes - Test method for resistance to external impacts.

GB/T 18042 Test method for creep ratio of thermoplastic pipes

GB/T 19278-2018 General terms and definitions for thermoplastic pipes, fittings and valves

GB/T 19471.1 Plastic pipe system rigid polyvinyl chloride (PVC-U) pipe elastic sealing ring joint declination sealing test method

GB/T 19471.2 Plastic piping system, rigid polyvinyl chloride (PVC-U) pipe elastic sealing ring joint negative pressure sealing test method

GB/T 20221-2006 Non-pressure buried sewage, drainage and hard polyvinyl chloride (PVC-U) pipe

GB/T 21873 Rubber seals, drain pipes and sewage pipes for interface seal material specifications

3.1 Terms and definitions The terms and definitions defined in

GB/T 19278-2018 and the following are applicable to this document. For ease of use, the following is repeated