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

GB/T 5836-1986

Replacing GB/T 5836.1-2006

**Unplasticized poly (vinyl chloride) (PVC-U) pipes for soil and
waste discharge inside buildings
(English Translation)**

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Foreword

GB/T 5836 is divided into 2 parts.

---GB/T 5836.2-2018 Unplasticized polyvinyl chloride (PVC-U) pipe fittings for building drainage.

This part is Part 1 of GB/T 5836.

This section was drafted in accordance with the rules given in GB/T 1.1-2009.

This part replaces GB/T 5836.1-2006 "Unplasticized Polyvinyl Chloride (PVC-U) Pipes for Building Drainage", and GB/T 5836.1-2006 in comparison, the main technical changes are as follows.

- Added terms and definitions (see Chapter 3);
- Modified the material requirements and added the requirements for resin K value (see 4.2);
- Added the classification of pipes. According to whether the additives contain lead, they are divided into lead-free pipes and lead-containing pipes (see 5.2);
- Corrected the nominal wall thickness of dn315 (see 6.3.1);
- Increase the elongation at break requirements (see Table 4);
- Deleted the requirements for the methylene chloride immersion test;
- Increase lead limit requirements (see 6.6);
- Modified the pipe drop hammer impact test conditions (see 7.9);
- The factory inspection items have increased the density requirements (see 8.3.1);
- The size group of pipes has been added (see 8.4.1);
- Modified the sampling plan to increase the acceptance quality limit (AQL) from 6.5 to 4.0 (see 8.4.2);
- Increased the performance of the mixed materials used for PVC-U pipes (see Appendix A).

Please note that certain contents of this document may involve patents. The issuing agency of this document is not responsible for identifying these patents.

This part was proposed by the China National Light Industry Council.

This part is under the jurisdiction of the National Plastic Products Standardization Technical Committee (SAC/TC48).

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1 Scope

This part of GB/T 5836 specifies the terms and definitions of unplasticized polyvinyl chloride (PVC-U) pipes (hereinafter referred to as "pipes") for building drainage Definitions, materials, product classification, requirements, test methods, inspection rules, markings, transportation and storage.

This section applies to pipes for drainage systems in buildings that use polyvinyl chloride (PVC) resin as the main raw material and are extruded. On the test Considering the chemical resistance and heat resistance of the material, it can also be used for industrial drainage pipes.

The pipes specified in this section are used in conjunction with the pipe fittings specified in GB/T 5836.2-2018.

2 Normative references

The following documents are indispensable for the application of this document. For dated reference documents, only the dated version applies to this article Pieces. For undated references, the latest version (including all amendments) applies to this document.

GB/T 1033.1-2008 Determination of the density of plastic non-foam plastics Part 1: Immersion method, liquid pycnometer method and titration method GB/T 1040.2-2006 Determination of tensile properties of plastics Part 2: Test conditions for molding and extrusion plastics GB/T 1633-2000 Thermoplastics Determination of Vicat Softening Temperature (VST) GB/T 2828.1-2012 Sampling inspection procedures by attributes Part 1: Batch inspection sampling plan retrieved by acceptance quality limit (AQL) GB/T 2918-1998 Standard environment for condition adjustment and testing of plastic samples GB/T 5761-2006 Suspension method general-purpose polyvinyl chloride resin GB/T 5836.2-2018 Unplasticized polyvinyl chloride (PVC-U) pipe fittings for building drainage GB/T 6671-2001 Thermoplastic pipe longitudinal shrinkage determination GB/T 8802-2001 Thermoplastic pipes and fittings Determination of Vicat softening temperature GB/T 8804.2-2003 Determination of tensile properties of thermoplastic pipes Part 2: Unplasticized polyvinyl chloride (PVC-U), Chlorinated polyvinyl chloride (PVC-C) and high impact polyvinyl chloride (PVC-HI) pipes GB/T 8806-2008 Determination of the dimensions of plastic parts in plastic piping systems GB/T 14152-2001 Thermoplastic pipe resistance to external impact test method hour hand rotation method GB/T 19278-2018 General terms and definitions for thermoplastic pipes, fittings and valves GB/T 21873-2008 Specification for interface sealing ring materials for rubber seals for water supply, drainage and sewage pipes GB/T 26125-2011 Determination of six restricted substances in electronic and electrical products (lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls and

polybrominated diphenyl ethers) QB/T 2568-2002 Solvent adhesive for hard polyvinyl chloride (PVC-U) plastic piping system QB/T 2803-2006 Rigid plastic pipe bending degree measurement method

3 Terms and definitions

The following terms and definitions defined in GB/T 19278-2018 apply to this document.

Un-leaded pipe

Take polyvinyl chloride (PVC) resin as the main raw material, and do not use lead additives in the production process.

4 Materials

4.1

The material for the production of pipes should be a mixture of unplasticized polyvinyl chloride (PVC-U). The mixed ingredients should be mainly polyvinyl chloride (PVC) resin, and add Necessary additives, should be evenly dispersed.

Note: See Appendix A for the performance of mixed ingredients.

4.2

PVC resin should meet the requirements of GB/T 5761-2006, and the K value should not be less than 64.

4.3

It is allowed to use a small amount of clean recycled materials produced by the same product produced by the factory.

4.4

Adhesive for connection should meet the requirements of QB/T 2568-2002.

4.5

The elastic sealing ring should meet the requirements of GB/T 21873-2008.

5 Product Classification

5.1

According to the connection form, it is divided into adhesive connection type pipe and elastic sealing ring connection type pipe.

5.2

According to the lead limit value, it is divided into lead-free pipes and lead-containing pipes.