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

GB/T 4219-1996

Replacing GB/T 4219-1996

**Plastics piping system for industrial applications --
Unplasticized poly (vinyl chloride) (PVC-U) -- Specifications for
components and the system -- Part 1: Pipes
(English Translation)**

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Foreword

GB/T 4219 "industrial hard PVC (PVC-U) piping systems" is expected to be divided into the following sections.

--- Part 1. Pipes;

--- Part 2. Fittings;

This section GB/T Section 14219, which corresponds to ISO 15493:2003 "Plastics piping systems for industrial Acrylonitrile - butadiene Ene - styrene (ABS), hard polyvinyl chloride (PVC-U), chlorinated polyvinyl chloride (PVC-C) component and system specification metric series' hard-poly Vinyl chloride pipe section.

The partial modification of the use of ISO 15493:2003 in PVC-U section, this part of ISO 15493 in PVC-U inner part of the main technical Yung same, the main differences are.

--- Removal of non-PVC-U production parts material requirements;

--- Cancellation material density requirements;

--- Cancellation nominal diameter 12mm specifications;

--- Hydraulic adjustment ring stress tests;

--- Drop hammer impact test to increase test temperature -5 °C level;

--- Added Appendix A (Informative Appendix) PVC-U pipe material predictive strength, Annex B (informative) pipe series S, standard Size ratio SDR with nominal pressure PN table.

This Part replaces GB/T 4219-1996 "chemical with a hard polyvinyl chloride (PVC-U) pipes." this part of GB/T 4219-1996 The main technical differences are.

--- Table 1 as the relationship between temperature and pressure information appendix;

--- Pipe specifications from 20mm ~ 710mm to 16mm ~ 400mm;

--- Physical and mechanical properties increase methylene chloride immersion test, and

drop hammer impact test, the abolition of curvature, the degree of corrosion, acetone soak and stretch Test, test flat;

--- Increase the applicability of the test system;

--- Added Appendix A (Informative Appendix) PVC-U pipe material predictive strength, Annex B (informative) pipe series S, standard Size ratio SDR with nominal pressure PN table, Appendix C (informative) component temperature of the material to stress reduction factor.

This part of the Annex A, Annex B, Annex C is informative appendix.

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

This part of the National Plastics Standardization Technical Committee of plastic pipe, fittings and valves at the Technical Committee (TC48/SC3) centralized.

This section is drafted. Youli Holding Group Co., Ltd., Fujian Asia-new material Technology Co., Ltd., Zhejiang fiscal Pipeline Technology Co., Ltd., Chongqing Gu plastic Electric Co., Ltd., Hebei Baoshuo Pipe Co., Ltd., a limited Georg Fischer Piping Systems the company.

1 Scope

GB/T 4219 provisions of this part of the polyvinyl chloride (PVC) resin as the main raw material, extrusion industry with a hard PVC (PVC-U) pressure pipes (hereinafter referred to as "pipe") material, product classifications, requirements, test methods, inspection rules and signs, packaging, transportation, Storage.

This section applies to rigid PVC piping systems for industrial use, but also for transporting pressurized water supply and drainage and sewage treatment, water treatment, petroleum, Powder chemical, power electronics, metallurgy, electroplating, paper, food and beverage, pharmaceutical, central air conditioning, construction and other fields, and transmission fluid.

Note 1: When used for transporting explosive media, should meet the requirements of fire and explosion.

Note 2: The design should consider the impact of temperature change on the transmission medium with the pipe, the pipe should be considered low-temperature brittleness and high temperature creep recommended temperature range-5 °C ~ 45 °C.

Note 3: When used to transport drinking water, food and beverage, pharmaceutical, and its health performance should be consistent with the relevant provisions.

2 Normative references

The following documents contain provisions which, through reference to GB/T 4219 to the present, constitute provisions of this section. For dated reference documents Member, all

subsequent amendments (not including errata content) or revisions do not apply to this section, however, encouraged to reach under this section Parties to research agreement to use the latest versions of these documents. For undated reference documents, the latest versions apply to this section.

GB/T 1033-1986 plastic density and relative density test method (eqv ISO/DIS1183. 1984)
 GB/T 2828.1-2003 Sampling procedures for inspection - Part 1. by acceptance quality limit (AQL) retrieval batch test sample Programme (ISO 2859-1:1999, IDT) GB/T 2918-1998 standard plastic sample conditioning and environmental tests (idt ISO 291:1997) GB/T 6111-2003 Test method for conveying fluid pressure within the thermoplastic pipe (ISO 1167:1996, IDT) GB/T 6671-2001 Determination of thermoplastic plastic pipe longitudinal reversion (eqv ISO 2505:1994) GB/T 8802-2001 Thermoplastics pipes, fittings Vicat softening temperature measured (eqv ISO 2507:1995) GB/T 8806 plastic pipe size measurement method (GB/T 8806-1988, eqv ISO 3126. 1974) GB/T 13526 hard polyvinyl chloride (PVC-U) pipes methylene chloride immersion test method (GB/T 13526-2007)
 GB/T 14152-2001 thermoplastic pipe resistance to external impact performance test clock method (GB/T 14152-2001, eqv ISO 3127:1994) GB/T 18252 Plastics piping systems extrapolation determination of thermoplastic pipe long-term hydrostatic strength (GB/T 18252-2000, neq ISO/DIS9080.1997) GB/T 19278-2003 Thermoplastics pipes, fittings and valves General terms and their definitions QB/T 2568-2002 rigid polyvinyl chloride (PVC-U) Plastics piping systems with solvent-based adhesives ISO 4433-1:1997 Thermoplastics pipes for the chemical fluid resistance classification - Part 1. Test methods for dipping ISO/T R10358.1993 Plastics pipes and fittings comprehensive chemical resistance classification table

3 Terms and definitions, symbols

GB/T 19278-2003, and given the following terms and definitions, symbols applicable to GB/T 4219 of this section.