

CCS G 33



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

GB/T 19473.3-2020

Replacing GB/T 19473.3-2004

**Polybutene (PB) piping system for hot and cold water - Part 3:
Fittings**

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Table of Contents

Foreword

1 Scope

2 Normative references

Foreword

GB/T 19473 "Polybutene (PB) Piping System for Hot and Cold Water" is divided into the following parts.

---Part 1.General Provisions;

---Part 2.Pipes;

---Part 3.Pipe fittings;

---Part 5.System applicability.

This part is Part 3 of GB/T 19473.

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

This part replaces GB/T 19473.3-2004 "Polybutene (PB) Piping System for Cold and Hot Water Part 3.Pipe Fittings", and is in line with GB/T 19473.3-2004

Compared with.2004, the main technical changes are as follows.

--- Deleted "GB/T 19473 does not apply to fire extinguishing systems and non-aqueous fluid delivery systems" in the scope (see.2004 edition

Chapter 1);

---Added the requirement that "graded polybutene compounds should be used" (see 4.1);

---Added the tips on the metal materials and sealing materials of pipe fittings (see 4.2);

---Added the "recycled materials should not be used in the production of pipe fittings" (see 4.3);

--- PB-R pipe fittings have been added (see 5.1);

---Added hot melt butt connection pipe fittings (see 5.2);

--- Deleted the regulation of pipe fittings classified by pipe series S (see 5.2 in.2004 edition);

---Modified the color regulations (see 6.1, 6.1 of the.2004 edition);

- Modified the size specifications of the pipe fittings (see 6.3, 6.4 in the.2004 edition);
- Modified the "hot melt socket connection pipe fitting socket" schematic diagram (see Figure 1,.2004 version of Figure 1);
- Revised the schematic diagram of "Electrofusion pipe fitting socket" (see Figure 2, Figure 2 of the.2004 edition);
- Modify the "mechanical properties" to "hydrostatic strength" (see 6.4, 6.5 in the.2004 edition);
- The 20 degrees C/22h hydrostatic strength requirement of PB-H pipe fittings has been increased (see Table 3);
- Modified the test pressure of the hydrostatic strength of PB-H/S3.2 pipe fittings (see Table 3, Table 3 of the.2004 edition);
- Added PB-R pipe fittings hydrostatic strength requirements (see Table 3);
- Added requirements for ash content, oxidation induction time, pigment dispersion, and light transmittance of pipe fittings (see Table 4);
- Adjust the system applicability into a separate chapter, and delete the specific content of the system applicability requirements (see Chapter 7,.2004 edition 6.8);
- Modified the test method (see Chapter 8, Chapter 7 of the.2004 edition);
- Modified the group batch (see 9.2.1, 8.2 of the.2004 edition);
- Modified the grouping (see 9.2.2, 8.5.1 of the.2004 edition);
- Modified the requirements for type inspection (see 9.3, 8.3 of the.2004 edition);
- Modified the item requirements of the factory inspection (see 9.4.1, 8.4.1 of the.2004 edition);
- Amend "Qualified Quality Level 6.5" to "Acceptance Quality Limit (AQL) 4.0" and expand the batch range (see 9.4.2,.2004 edition 8.4.2);
- Modified the requirements for type inspection (see 9.5, 8.5 in.2004 edition);
- Modified the judgment rules (see 9.6, 8.6 in the.2004 edition);
- Modified the content of the logo (see 10.1, 9.1 of the.2004 edition);
- Modified the packaging regulations (see 10.2, 9.2 in the.2004 edition);
- Modified the transportation regulations (see 10.3, 9.3 of the.2004 edition);

---Added an informative appendix "Structural changes in this part compared with ISO 15876-3.2017" (see Appendix A);

---Added an informative appendix "Technical differences between this part and ISO 15876-3.2017 and their reasons" (see Appendix B).

This part uses the redrafting method to modify and adopt ISO 15876-3.2017 "Plastic Piping System for Cold and Hot Water (PB) No. 3

Part. Pipe Fittings.

Compared with ISO 15876-3.2017, this part has many structural adjustments. Appendix A lists this part and ISO 15867-3.

The 2017 chapter number comparison list.

Compared with ISO 15876-3.2017, there are technical differences between this part and the corresponding technical differences and their reasons in Appendix B.

List.

This section has made the following editorial changes.

---In order to be consistent with my country's technical standard system, the standard name is changed to "Polybutene (PB) Piping System for Cold and Hot Water Part 3. Pipe Pieces.

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).

Drafting organizations of this section. Guangdong Liansu Technology Industrial Co., Ltd., Baolu Qixing Pipe Industry Co., Ltd., Zhejiang Zhongcai Pipeline Technology Co., Ltd.

Co., Ltd., Yonggao Co., Ltd., Chengdu Chuanlu Plastic Group Co., Ltd., Wuhan Century Jinniu Pipe Fitting Technology Co., Ltd., Shanghai Baidie Pipe

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1 Scope

This part of GB/T 19473 specifies polybutene pipe fittings (hereinafter referred to as pipe fittings) that are injection-molded with polybutene blends as raw materials

Terms and definitions, symbols and abbreviations, materials, product classification, requirements, system applicability, test methods, inspection rules and signs, packaging, shipping

Loss and storage.

This part, together with other parts of GB/T 19473, applies to building cold and hot water pipe systems, including drinking water and heating pipes

system.

Note. The purchaser is responsible for selecting this product appropriately according to specific application requirements and in conjunction with relevant laws, standards or specifications.

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 2828.1 Sampling inspection procedure by attributes Part 1. Batch inspection sampling plan retrieved by acceptance quality limit (AQL)

(GB/T 2828.1-2012, ISO 2859-1.1999, IDT)

GB/T 2918 Standard environment for condition adjustment and testing of plastic specimens (GB/T 2918-2018, ISO 291.2008, MOD)

GB/T 3682.1 Determination of Melt Mass Flow Rate (MFR) and Melt Volume Flow Rate (MVR) of Plastic Thermoplastics

Part 1. Standard method (GB/T 3682.1-2018, ISO 1133-1.2011, MOD)

GB/T 6111-2018 Determination of internal pressure resistance of thermoplastic piping systems for fluid transportation (ISO 1167-1.2006;

ISO 1167-2.2006; ISO 1167-3.2007; ISO 1167-4.2007, NEQ)

GB/T 7306 (all parts) 55° sealed pipe thread [ISO 7-1]

GB/T 8806 Plastic piping system plastic parts size determination (GB/T 8806-2008, ISO 3126.2005, IDT)

GB/T 9345.1 Determination of ash content of plastics Part 1. General methods (GB/T