



**NSF International**  
Special Engineered Specification  
NSF SE 29552

# **Polybutylene (PB) Plastics Molding Materials**

The Public  
Health and Safety  
Company.™

**Specifications for a Special Engineered (SE) Product  
NSF SE 29552  
Polybutylene (PB) Plastics Molding Materials**

**1. Purpose:**

This specification defines the minimum product-specific requirements for Polybutylene (PB) Plastics Molding Materials.

**2. Scope of Specification:**

This specification identifies the application, reference documents, material requirements, testing requirements, product marking, and in-plant quality control testing Polybutylene (PB) Plastics Molding Materials.

**3. Application:**

Polybutylene material meeting the requirements of this specification is for molded polybutylene components for use in potable water pressure applications.

**4. Reference Documents:**

**ASTM Standards:**

ASTM D2581- 09 Standard Classification System for Polybutylene (PB) Plastics Molding and Extrusion Materials

**NSF Standards:**

NSF/ANSI Standard 14 – Plastic Piping System Components and Related Materials

NSF/ANSI Standard 61 – Drinking Water Systems Components – Health Effects

**5. Terminology:**

5.1 The terminology used in this specification shall comply with section 3, ASTM D2581.

**6. General Requirements:**

6.1 Compound shall comply with the section 6 and section 7 of ASTM D2581.

6.2 Compound shall comply with the health effects requirements of NSF/ANSI/CAN 61.

**7. Testing Requirements:**

7.1 Specimens shall be prepared in accordance with section 9 of ASTM D2581.

7.2 Specimens shall be conditioned in accordance with section 10 of ASTM D2581.

7.3 Physical properties shall be determined in accordance with section 11 of ASTM D2581.

7.3.1 Density shall be determined in accordance with section 11.1.1 of ASTM D2581.

7.3.2 Flow rate shall be determined in accordance with section 11.1.2 of ASTM D2581.

7.3.3 Tensile strength and elongation shall be determined in accordance with section 11.1.3 of ASTM D2581.

7.3.4 Carbon black content shall be determined in accordance with section 11.1.4 of ASTM D2581 for Class C compounds only.

**8. Packaging Marking:**

8.1 Product packaging or bill of lading shall be marked with material trade name, manufacturer name or trademark, and manufacturers lot number.

**9. In-Plant Quality Control Requirements:**

9.1 The manufacturer shall be in compliance with Section 9 of NSF/ANSI 14.

9.2 Materials suppliers shall monitor materials for the physical properties in Section 7.3 on a semiannual basis (twice per year). Records of the test data shall be maintained at each production facility.