# *Polybutene-1* PB 1600M

**Polybutene-1**

**Product Description**

Polybutene-1 grade **PB 1600M** is a formulated random copolymer of butene-1 with low ethylene content and contains both slip and antiblock.

In blends with PE polymers, it forms a separate, but well-dispersed phase. Its primary use is as a minority blend component in the seal layer of easy-opening packaging films, produced by blown film extrusion. A typical PE blend partner for **PB 1600M** could be any ethylene homo-or copolymer in the melt index range of 0.5 to 2.0 g/10min.

PB-1 crystallizes slowly and is very shear sensitive in its flow behavior.

Food law compliance information about this product can be found in separate product documentation.

This product is not intended for use in medical and pharmaceutical applications.

**Product Characteristics**

| | |
|---|---|
| **Status** | Commercial: Active |
| **Test Method used** | ISO |
| **Availability** | North America |
| **Typical Customer Applications** | Blown Film, Peelable Film, Speciality Film |

| Typical Properties | Method | Value | Unit |
|---|---|---|---|
| **Physical** | | | |
| Density | ISO 1183 | 0.913 | g/cm³ |
| Melt flow rate (MFR) | ISO 1133 | | |
| (190°C/2.16kg) | | 1 | g/10 min |
| (190°C/10kg) | | 30 | g/10 min |
| **Mechanical** | | | |
| Flexural modulus | ISO 178 | 250 | MPa |
| Tensile Strength at Break | ISO 8986-2 | 30 | MPa |
| Tensile Elongation at Break | ISO 8986-2 | 300 | % |
| *Note*: Measured on specimens conditioned for 10 days at 20°C | | | |
| **Thermal** | | | |
| Melting temperature | DSC | | |
| | | 115 | °C |
| *Note*: Tm1 | | | |
| | | 97 | °C |
| *Note*: Tm2 | | | |

**Additional Properties**

Tm2 corresponds with the melting point of crystalline form 2 which is measured immediately after solidification. Tm2 corresponds with the melting point available for each batch on the Certificate of Analysis (COA).

Recommended processing temperatures: 180°C to 200°C. In cases were higher temperatures are required please contact your appropriate technical contact for support.

**Notes**

Typical properties; not to be construed as specifications.