Polybutene-1 PB 0300M

Polybutene-1

Product Description

Polybutene-1 grade **PB 0300M** is a semi-crystalline homopolymer, which is used where creep, environmental stress crack resistance and elevated temperature performance are key requirements.

This polymer is highly compatible with polypropylene due to its similar molecular structure. It is used to improve mechanical properties at elevated temperatures. It is less compatible in blends with polyethylene but it is still easily dispersible . It forms a 2 phase structure which is the basis of the seal peel technology for easy-opening packaging applications.

Its relatively slow kinetics of crystallization allow for an excellent wetting behavior. Its highly shear-sensitive flow behavior means that it remains easily dispersible also in even more incompatible polymers like thermoplastic elastomers.

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	Europe, North America, Asia-Pacific, Australia/NZ, Africa-Middle East, Latin America
Typical Customer Applications	Cast Film, Peelable Film, Speciality Film

Typical Properties	Method	Value	Unit
Physical			
Density	ISO 1183	0.915	g/cm³
Melt flow rate (MFR)	ISO 1133		
(190°C/2.16kg)		4	g/10 min
(190°C/10kg)		70	g/10 min
Mechanical			
Flexural modulus	ISO 178	450	MPa
Tensile Strength at Yield	ISO 8986-2	19.5	MPa
Tensile Strength at Break	ISO 8986-2	35	MPa
Tensile Elongation at Break	ISO 8986-2	300	%
Note: Measured on specimens conditioned for 10 days at 20°C			
Thermal			
Melting temperature	DSC		
		127	°C
Note: Tm1			
		116	°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: 190°C to 230°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.