

Technical Data Sheet

Toppy/PB 0110M



Polybutene-1

Product Description

Polybutene-1 (PB-1) grade *Toppy*/PB 0110M 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 can be 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 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.

This grade is not intended for medical and pharmaceutical applications.

Application	Peelable Film; Specialty Film
Market	Flexible Packaging; Rigid Packaging
Processing Method	Blown Film
Attribute	Good Heat Seal; Good Organoleptic Properties; Good Processability

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Flow Rate			
(190 °C/2.16 kg)	0.4	g/10 min	ISO 1133-1
(190 °C/10.0 kg)	12	g/10 min	ISO 1133-1
Density	0.914	g/cm ³	ISO 1183-1
Mechanical			
Flexural Modulus	450	MPa	ISO 178
Tensile Strength at Break	35	MPa	ISO 8986-2
Tensile Elongation at Break	300	%	ISO 8986-2
Thermal			
Melting Temperature			
Tm1	128	°C	ISO 11357-3
Tm2	117	°C	ISO 11357-3

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).