

Technical Data Sheet

Toppy/PB 8220M



Polybutene-1

Product Description

Polybutene-1 (PB-1) grade *Toppy*/PB 8220M is a random copolymer of butene-1 with medium ethylene content.

This grade is highly compatible with polypropylene due to its similar molecular structure, and it is used to modify the sealing behavior of PP based films: a typical example is its use to reduce the seal initiation temperature of BOPP sealing layers.

The relatively slow kinetics of crystallization allow an excellent wetting behavior.

Toppy/PB 8220M highly shear-sensitive flow behavior means that it remains easily dispersible also in even more incompatible polymers like thermoplastic elastomers.

Toppy/PB 8220M can also be used in seal-peel application. Compared with *Toppy*/PB 8640M or *Toppy*/PB 8340M, in blown film seal-peel *Toppy*/PB 8220M provides better optical properties (haze and clarity) but with narrow sealing window.

This grade is not intended for medical and pharmaceutical applications.

Application	Bags & Pouches; Food Packaging Film; Lamination Film; Peelable Film; Secondary Packaging; Specialty Film
Market	Flexible Packaging; Rigid Packaging
Processing Method	Blown Film; BOPP; Cast Film
Attribute	Good Heat Seal; Good Optical Properties; Good Organoleptic Properties; Good Processability

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Flow Rate			
(230 °C/2.16 kg)	7.5	g/10 min	ISO 1133-1
(190 °C/2.16 kg)	2.5	g/10 min	ISO 1133-1
Density	0.901	g/cm ³	ISO 1183-1
Mechanical			
Flexural Modulus	140	MPa	ISO 178
Tensile Strength at Break	32	MPa	ISO 8986-2
Tensile Elongation at Break	300	%	ISO 8986-2
Thermal			
Melting Temperature			
Tm1	97	°C	ISO 11357-3
Tm2	85	°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).			