Technical Data Sheet

Toppyl PB 8220M

Polybutene-1

Product Description

Polybutene-1 (PB-1) grade *Toppyl* 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.
Toppyl PB 8220M highly shear-sensitive flow behavior means that it remains easily dispersible also in even more incompatible polymers like thermoplastic elastomers.

Toppyl PB 8220M can also be used in seal-peel application. Compared with *Toppyl* PB 8640M or *Toppyl* PB 8340M, in blown film seal-peel *Toppyl* 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/cm³	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).