Polybutene-1 PB 0800M

LyondellBasell Industries - Polybutylene

Monday, November 4, 2019

General Information

Product Description

Polybutene-1 grade Koattro PB0800M is a semi-crystalline homopolymer, which can be used where creep and 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's relative slow crystalliation kinetics allows for an excellent wetting behaviour. Besides their high shear sensitive flow behaviour they remain easily dispersible also in even more incompatible polymers like thermoplastic elastomers.

General			
Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Creep Resistant • Good ESCR (Stress Crack Resist.) • Good Thermal Stability	• High Flow • Homopolymer • Medium Stiffness	• Rapid Wetting • Semi Crystalline
Uses	• Blending • Color Concentrates • Construction Applications	• Industrial Applications • Spunbond Nonwovens • Staple Fibers	• Textile Applications
Forms	• Pellets		
Processing Method	• Meltblown Nonwovens	• Spunbond Nonwovens	

ASTM & ISO Properties [1]

Physical	Nominal Value	Unit	Test Method
Density	0.915	g/cm³	ISO 1183
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	200	g/10 min	ISO 1133
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Stress [2] (Break)	4350	psi	ISO 8986-2
Tensile Strain [2] (Break)	300	%	ISO 8986-2
Flexural Modulus [2]	59500	psi	ISO 178
Thermal	**Nominal Value**	**Unit**	**Test Method**
Melting Temperature (DSC) [3]	255	°F	ISO 3146

Processing Information

Extrusion	Nominal Value	Unit
Melt Temperature	338 to 428	°F

Extrusion Notes

Recommended processing temperatures: 190°C to 230°C. In cases were higher temperatures are required please contact your appropriate technical contact for support.

Notes

[1] Typical properties: these are not to be construed as specifications.

[2] Measured on specimens conditioned for 10 days at 20°C

[3] Tm1