



Polybutene-1 PB 0300M

LyondellBasell Industries - Polybutylene

Monday, November 4, 2019

General Information

Product Description

Polybutene-1 grade Koattro 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.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Creep Resistant • Dispersible • Good ESCR (Stress Crack Resist.)	• Homopolymer • Medium Stiffness • Rapid Wetting	• Semi Crystalline
Uses	• Blending • Film	• Flexible Packaging • Packaging	• Rigid Packaging • Seals
Forms	• Pellets		

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	0.915	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR)			ISO 1133
190°C/10.0 kg	70	g/10 min	
190°C/2.16 kg	4.0	g/10 min	
Mechanical	Nominal Value	Unit	Test Method
Tensile Stress (Break)	5080	psi	ISO 8986-2
Tensile Strain ² (Break)	300	%	ISO 8986-2
Flexural Modulus	65300	psi	ISO 178
Thermal	Nominal Value	Unit	Test Method
Peak Crystallization Temperature			ISO 11357-3
-- ³	241	°F	
-- ⁴	261	°F	

Processing Information

Extrusion	Nominal Value	Unit
Melt Temperature	338 to 428	°F

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Notes

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

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

³ Tm2

⁴ Tm1