

Polyintec® BXM5535

High Density Polyethylene Copolymer for Blow Molding

Product Description:

Polyintec® BXM5535 is a high-density polyethylene (HDPE) copolymer resin produced using slurry technology. It is designed for blow molding applications, offering excellent processability and performance. It is intended for use in various applications, offering good strength, impact resistance, and environmental stress crack resistance. Polyintec® BXM5535 meets all requirements of the U.S. FDA as specified in 21 CFR 177.1520, for safe use in polyolefin articles intended for direct food contact.

Suggested Applications:

HIC Bottles, Toys, Profile Extrusion.

Nominal Physical Properties:

PROPERTY	ASTM TEST METHOD	UNIT	VALUE
Resin Properties			
Melt Index (190°C/2.16 kg)	D1238	g/10 min	0.35
Density	D4883	g/cc	0.955
Compression Molded Samples			
Tensile Strength @ Yield	D638	MPa (psi)	27 (4000)
Tensile Strength @ Break	D638	MPa (psi)	17 (2500)
Elongation @ Yield	D638	%	9
Elongation @ Break	D638	%	>600
Flexural Modulus (Tangent)	D790	MPa (psi)	1450 (210000)
Flexural Modulus (2% Secant)	D790	MPa (psi)	1035 (150000)
Notched Izod Impact Strength	D256	kJ/m ² (ft-lbf/in)	16 (3.2)
Hardness (Shore D)	D2240	-	64
Vicat Softening Point	D1525	°C (°F)	127 (261)
Brittleness Temperature	D746	°C (°F)	<-75 (<-103)
Heat Deflection Temp. (@ 66 psi)	D648	°C (°F)	75 (167)
Heat Deflection Temp. (@ 264 psi)	D648	°C (°F)	48 (118)
ESCR (Cond. B, 100% Igepal, F50)	D1693	hrs	30

Important Note:

The properties listed above are typical values obtained under laboratory conditions and are not intended to be used as specifications. Users should perform their own tests to determine suitability. The information is reliable to the best of our

knowledge, but no warranties are expressed or implied.