

Polyman ABS E/Hi S NAT

LyondellBasell Industries - Acrylonitrile Butadiene Styrene

General Information

Product Description

High impact ABS extrusion grade

General

Features	• High Impact Resistance
Processing Method	• Extrusion • Injection Molding
Resin ID	• ABS

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.03	g/cm ³	ISO 1183/A
Melt Volume-Flow Rate (MVR) (220°C/10.0 kg)	9.0	cm ³ /10min	ISO 1133
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	218000	psi	ISO 527-1/1A/1
Tensile Stress (Yield)	5800	psi	ISO 527-2/1A/50
Tensile Strain (Yield)	2.5	%	ISO 527-2/1A/50
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	9.0	ft-lb/in ²	
73°F	16	ft-lb/in ²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F	No Break		
73°F	No Break		
Hardness	Nominal Value	Unit	Test Method
Ball Indentation Hardness (H 358/30)	12300	psi	ISO 2039-1
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	199	°F	ISO 75-2/Bf
Deflection Temperature Under Load 264 psi, Unannealed	190	°F	ISO 75-2/Af
Vicat Softening Temperature			
--	194	°F	ISO 306/B50
--	228	°F	ISO 306/A50
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	> 1.0E+15	ohms	IEC 60093
Volume Resistivity	> 1.0E+13	ohms·m	IEC 62631-3-1
Comparative Tracking Index	600	V	IEC 60112
Flammability	Nominal Value	Unit	Test Method
Burning Rate			
0.0787 in	< 3.9	in/min	FMVSS 302
0.0787 in	< 3.9	in/min	ISO 3795
Flammability Classification (0.06 in)	HB		IEC 60695-11-10, -20

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Flammability	Nominal Value	Unit	Test Method
Glow Wire Flammability Index			IEC 60695-2-12
0.06 in	1200	°F	
0.12 in	1200	°F	

Processing Information

Extrusion	Nominal Value	Unit
Drying Temperature	158 to 176	°F