

Technical Data Sheet

Polyman (ABS) LP 320

Acrylonitrile Butadiene Styrene

LyondellBasell Industries

Engineering Plastics

Product Description

Medium impact ABS grade

General

Processing Method	• Injection Molding
Resin ID (ISO 1043)	• ABS

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.04 g/cm ³	1.04 g/cm ³	ISO 1183
Melt Volume-Flow Rate (MVR) (220°C/10.0 Kg)	17 cm ³ /10min	17 cm ³ /10min	ISO 1133
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus	336000 psi	2320 MPa	ISO 527-1/1A/1
Tensile Stress			ISO 527-2/1A/50
Yield	6630 psi	45.7 MPa	
Break	5080 psi	35.0 MPa	
Tensile Strain (Yield)	2.5 %	2.5 %	ISO 527-2/1A/50
Nominal Tensile Strain at Break	5.4 %	5.4 %	ISO 527-2/1A/50
Flexural Modulus ¹	354000 psi	2440 MPa	ISO 178
Flexural Stress ¹			ISO 178
4.3% Strain	9860 psi	68.0 MPa	
3.5% Strain	9750 psi	67.2 MPa	
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Charpy Notched Impact Strength (73°F (23°C))	10 ft·lb/in ²	21 kJ/m ²	ISO 179/1eA
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			
66 Psi (0.45 Mpa), Unannealed	176 °F	80.0 °C	ISO 75-2/B
264 Psi (1.8 Mpa), Unannealed	167 °F	75.0 °C	ISO 75-2/A
Vicat Softening Temperature			
--	201 °F	94.0 °C	ISO 306/B50
--	221 °F	105 °C	ISO 306/A50
Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Burning Rate			
0.0787 In (2.00 Mm)	< 3.9 in/min	< 100 mm/min	ISO 3795
0.0787 In (2.00 Mm)	< 3.9 in/min	< 100 mm/min	FMVSS 302

Additional Information

- 1.) Not for use in food contact applications
- 2.) Not for use in medical or pharmaceutical applications

Notes

¹ 0.079 in/min (2.0 mm/min)

Notes

These are typical property values not to be construed as specification limits.