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/cm³	1.04 g/cm³	ISO 1183
Melt Volume-Flow Rate (MVR) (220°c/10.0 Kg)	17 cm³/10min	17 cm³/10min	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/in²	21 kJ/m²	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.