

Technical Data Sheet

Polyman ABS LP 320 CN NAT

Acrylonitrile Butadiene Styrene

Product Description

Medium impact ABS grade

Processing Method Injection Molding

Resin ID ABS

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Volume Flow Rate, (220 °C/10.0 kg)	17	cm ³ /10 min	ISO 1133
Density	1.04	g/cm ³	ISO 1183
Mechanical			
Tensile Stress at Yield, (Type 1A, 50 mm/min)	45.7	MPa	ISO 527-2
Nominal Tensile Strain at Break, (50 mm/min, Type 1A)	5.4	%	ISO 527-2
Flexural Modulus, (2.0 mm/min)	2440	MPa	ISO 178
Tensile Strain at Yield, (Type 1A, 50 mm/min)	2.5	%	ISO 527-2
Tensile Stress at Break, (Type 1A, 50 mm/min)	35.0	MPa	ISO 527-2
Tensile Modulus, (1 mm/min, Type 1A)	2320	MPa	ISO 527-1
Flexural Stress			
(2.0 mm/min, 3.5%)	67.2	MPa	ISO 178
(2.0 mm/min, 4.3%)	68.0	MPa	ISO 178
Impact			
Charpy Impact Strength - Notched, (23 °C, Type 1, Edgewise, Notch A)	21	kJ/m ²	ISO 179
Thermal			
Vicat Softening Temperature			
(B (50N), 50 °C/h)	94.0	°C	ISO 306
(A (10N), 50 °C/h)	105	°C	ISO 306
Deflection Temperature Under Load Unannealed (0.45 MPa)	80	°C	ISO 75-2/B
Deflection Temperature Under Load Unannealed (1.80 MPa)	75	°C	ISO 75-2/A
Flammable			
Burning Rate			
(2.00 mm)	<100	mm/min	FMVSS 302
(2.00 mm)	<100	mm/min	ISO 3795