

Technical Data Sheet

Polyman ABS LP 500 RCP BLK



Acrylonitrile Butadiene Styrene

Product Description

Unfilled ABS formulated on mechanical recycled sourcing. The product is available in black color, pellet form. Sustainability: According with the requirements of Standard ISO 14021:2016, Polyman LP 500 contains 95% of recycled material that is fully based on post-consumer waste. Recycled content according to DIN SPEC 91446:2021-12: R95 Data Quality Level according to DIN SPEC 91446:2021-12: DQL4

Processing Method	Injection Molding
Attribute	Medium Impact Resistance
Resin ID	ABS

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Volume Flow Rate, (220 °C/10.0 kg)	27	cm ³ /10 min	ISO 1133
Density, (Method A)	1.06	g/cm ³	ISO 1183
Apparent (Bulk) Density	0.65	g/cm ³	ISO 60
Mechanical			
Tensile Stress at Yield, (Type 1A, 50 mm/min)	42.0	MPa	ISO 527-2
Tensile Strain at Yield, (Type 1A, 50 mm/min)	2.5	%	ISO 527-2
Tensile Modulus, (1 mm/min, Type 1A)	2500	MPa	ISO 527-1
Impact			
Charpy Impact Strength - Notched, (23 °C, Type 1, Edgewise, Notch A)	10	kJ/m ²	ISO 179
Charpy Impact Strength - Unnotched, (23 °C, Type 1, Edgewise)	36	kJ/m ²	ISO 179
Thermal			
Vicat Softening Temperature, (B (50N), 50 °C/h)	95.0	°C	ISO 306
Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise)	85.0	°C	ISO 75-2/B
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	74.0	°C	ISO 75-2/A
Electrical			
Volume Resistivity	10000000000000	ohm*m	IEC 62631-3-1
Surface Resistivity	>1.0E+15	ohm	IEC 60093
Flammable			
Burning Rate			
(2.00 mm)	<100	mm/min	ISO 3795
(2.00 mm)	<100	mm/min	FMVSS 302
UL Information			

Flammability Classification		
(1.5 mm)	HB	IEC 60695-11-10, -20
(3.0 mm)	HB	IEC 60695-11-10, -20

Injection Parameters	Nominal Value	Units
Drying Time	2.0 to 4.0	hr
Drying Temperature	80	°C
Processing (Melt) Temp	230 to 250	°C
Mold Temperature	40 to 80	°C