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: R95Data 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	cm³/10 min	ISO 1133
Density, (Method A)	1.06	g/cm³	ISO 1183
Apparent (Bulk) Density	0.65	g/cm³	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/m²	ISO 179
Charpy Impact Strength - Unnotched, (23 °C, Type 1, Edgewise)	36	kJ/m²	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