

Technical Data Sheet

# Polyman (ABS) LP 500 RCP

Acrylonitrile Butadiene Styrene  
 LyondellBasell Industries  
 Engineering Plastics

**Product Description**  
 ABS Industrial Quality

General	
Features	• Medium Impact Resistance
Processing Method	• Injection Molding
Resin ID (ISO 1043)	• ABS

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.06 g/cm <sup>3</sup>	1.06 g/cm <sup>3</sup>	ISO 1183/A
Melt Volume-Flow Rate (MVR) (220°C/10.0 Kg)	27 cm <sup>3</sup> /10min	27 cm <sup>3</sup> /10min	ISO 1133

Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus	363000 psi	2500 MPa	ISO 527-1/1A/1
Tensile Stress (Yield)	6090 psi	42.0 MPa	ISO 527-2/1A/50
Tensile Strain (Yield)	2.5 %	2.5 %	ISO 527-2/1A/50

Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Charpy Notched Impact Strength (73°F (23°C))	4.8 ft·lb/in <sup>2</sup>	10 kJ/m <sup>2</sup>	ISO 179/1eA
Charpy Unnotched Impact Strength 73°F (23°C)	17 ft·lb/in <sup>2</sup>	36 kJ/m <sup>2</sup>	ISO 179/1eU

Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load 66 Psi (0.45 Mpa), Unannealed	185 °F	85.0 °C	ISO 75-2/Bf
264 Psi (1.8 Mpa), Unannealed	165 °F	74.0 °C	ISO 75-2/Af
Vicat Softening Temperature	203 °F	95.0 °C	ISO 306/B50

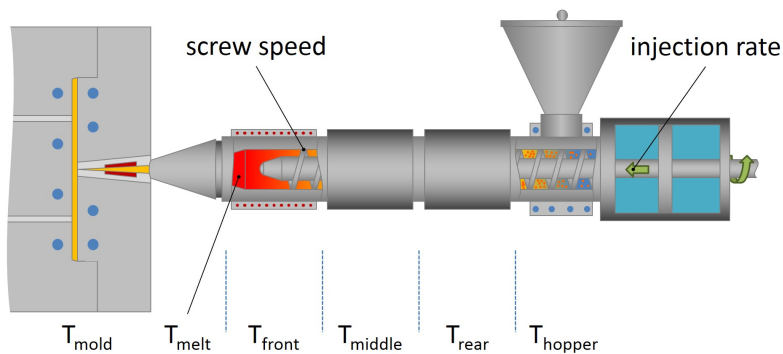
Electrical	Nominal Value (English)	Nominal Value (SI)	Test Method
Surface Resistivity	> 1.0E+15 ohms	> 1.0E+15 ohms	IEC 60093
Volume Resistivity	1.0E+13 ohms·m	1.0E+13 ohms·m	IEC 62631-3-1

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
Flammability Classification 0.06 In (1.5 Mm)	HB	HB	IEC 60695-11-10, -20
0.12 In (3.0 Mm)	HB	HB	

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Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	176 °F	80 °C
Drying Time	2.0 to 4.0 hr	2.0 to 4.0 hr
Processing (Melt) Temp	446 to 482 °F	230 to 250 °C
Mold Temperature	104 to 176 °F	40 to 80 °C

**Notes**

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