Polypropylene Homopolymer

Polypropylene is a crystalline material is noted for its high strength-to-weight ratio, excellent chemical resistance and high performance in thermoforming and corrosive environments.

- Appropriate for applications to 180°F (82°C)
- Meets FDA 21CFR 177.1520
- Chemical- and corrosion-resistant
- Meets USDA guidelines for use in federally inspected meat and poultry packing facilities
- Resists most acids, alkalis and solvents
- Thermoforming performance
- No moisture absorption

Applications:

Orthotic and prosthetic devices
Plenums and manifolds
Secondary containment
Valve bodies
Plating and anodizing process equipment
Pump components
Storage tanks

Property	Test Method	Units	Polypropylene Homopolymer
Physical			
Density	ASTM D-792	lbs/ft^3	56.3
Water Absorption	ASTM D-570	%	.008
Mechanical			
Yield Point	ASTM D-638	psi	5,150
Elongation at Yield	ASTM D-638	%	11
Tensile Break	ASTM D-638	psi	5,150
Elongation at Break	ASTM D-638	%	400
Tensile Modulus	ASTM D-638	psi	190,240
Flexural Modulus	ASTM D-790	psi	212,425
Flexural Strength	ASTM D-790	psi	7,250
Izod Impact	ASTM D-4020	ft-lb/in	1.2
Tensile Impact	DIN 53448	$ft\text{-}lbs/in^2$	269
Hardness	ASTM D-2240	Shore D	78
Thermal			
Heat Deflection Temperature @ 66psi	ASTM D-648	°F	210
Maximum Long Term Operating Temp.	UL746B	°F	180
Coefficient of linear thermal expansion	ASTM D696	in/in/°F	4.3×10^{-5}
Melt Point	ASTM D-3417	°F	329
Flammability	UL94		HB
Electrical			
Volume Resistivity	ASTM D-257	ohm-cm	$>10^{15}$
Surface Resistivity	ASTM D-257	ohm	$>10^{15}$

NOTE: The information contained herein are typical values intended for reference and comparison purposes only. They should NOT be used as a basis for design specifications or quality control. All values at 73°F (23°C) unless otherwise noted.

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