

Polypropylene Copolymer

Versatility is the word that best describes Proteus Co-Polymer. Perfect for fire truck tanks because it is inexpensive, easy to fabricate and won't crack from road vibration, Proteus Co- Polymer also works well in those orthotic devices that require a lower degree of rigidity. It can also be used in a variety of applications requiring chemical resistance and/or FDA compliance.

- High impact resistance strength
- Meets food handling guidelines
- Better resistance to cracking at low temperatures than other materials
- No moisture absorption
- More pliable than homopolymer
- Chemical- and corrosion resistant

Applications:

Die cutting pads	Fabricated parts/living hinge parts
Fire truck water and foam tanks	Orthotic and prosthetic devices
Plating and anodizing process equipment	Tanks - secondary containment

Property	Test Method	Units	Polypropylene Copolymer
Physical			
Density	ASTM D-792	lbs/ft ³	55.08
Water Absorption	ASTM D-570	%	0.01
Mechanical			
Yield Point	ASTM D-638	psi	3466
Elongation at Yield	ASTM D-638	%	11
Tensile Break	ASTM D-638	psi	4,814
Elongation at Break	ASTM D-638	%	649
Tensile Modulus	ASTM D-638	psi	152,192
Flexural Modulus	ASTM D-790	psi	183,860
Flexural Strength	ASTM D-790	psi	3,741
Izod Impact	ASTM D-4020	ft-lb/in	7.8
Tensile Impact	DIN 53448	ft-lbs/in ²	384
Hardness	ASTM D-2240	Shore D	73
Thermal			
Heat Deflection Temperature @ 66psi	ASTM D-648	°F	173
Maximum Long Term Operating Temp.	UL746B	°F	180
Coefficient of linear thermal expansion	ASTM D696	in/in/°F	4.3 x 10 ⁻⁵
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. Contact us for manufacturers' complete material property datasheets. All values at 73°F (23°C) unless otherwise noted.