

T50-500-196 Polyethylene Copolymer

T50-500-196 is a narrow molecular weight high density polyethylene copolymer intended for injection molding applications where a good balance of processability and end-use properties are required. This material meets the Food and Drug Administration requirements of 21 CFR 177.1520.

Typical Properties¹

	Values		ASTM Method
	English Units	SI Units	
Resin			
Density	—	0.9530 g/cc	D4883
Melt Index 190 C/2.16 kg	—	6.0 g/10 min	D1238
Compression Molded Sample			
Tensile Strength (2 in./min)			D 638
@ Yield	3,950 psi	27.2 MPa	
@ Break	3,620 psi	25.0 MPa	
Elongation (2 in./min)			D 638
@ Yield	10.3%	10.3%	
@ Break	> 1,000 %	>1,000 %	
Flexural Modulus			D790A
Tangent Method	188,600 psi	1,300 MPa	
Notched Izod Impact Strength	0.85 ft-lbf/in	4.45 kJ/m ²	D256
Hardness			D2240
Shore D	68	68	
Vicat Softening Point	259 F	126 C	D1525
Brittleness Temperature	<-94 F	<-70 C	D746
Heat Deflection Temperature			D648
@ 66 psi (455 kPa)	162 F	72 C	
Environmental Stress Crack Resistance			D1693
Condition B; 100% Igepal F50 (hrs.)	7	7	

¹ Typical properties will vary and are not to be used for specification purposes.