

T50-1000-178 Polyethylene Copolymer

T50-1000-178 is a narrow molecular weight distribution high density polyethylene copolymer intended for general purpose injection molding and extrusion applications. 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	—	0.951 g/cc	D4883
Melt Index 190 C/2.16 kg	—	11 g/10 min	D1238
Compression Molded Sample			
Tensile Strength (2 in/min)			D638
@ Yield	4,000 psi	28.0 MPa	
@ Break	1,650 psi	11.0 MPa	
Elongation (2 in/min)			D638
@ Yield	9.5 %	9.5 %	
@ Break	> 800 %	> 800 %	
Flexural Modulus			D790A
Tangent Method	173,000 psi	1,193 MPa	
Notched Izod Impact Strength	0.7 ft-lbf/in	3.7 kJ/m ²	D256
Hardness			D2240
Shore D	66	66	
Vicat Softening Point	253 F	123 C	D1525
Brittleness Temperature	<-94 F	<-70 C	D746
Deflection Temperature			D648
@ 66 psi (455 kPa)	163 F	73 C	
Environmental Stress Crack Resistance			D1693
Condition B; 100% Igepal F50 (hrs.)	4	4	

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