

T50-1000-187 Polyethylene Copolymer

T50-1000-187 is a narrow molecular weight distribution high density polyethylene copolymer intended for general purpose injection molding and extrusion applications. This resin contains a lubrication package for improved release from the mold. 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 Samples			
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 (455kPa)	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.