

T50-500 Polyethylene Copolymer

T50-500 is a high density polyethylene copolymer having a narrow molecular weight distribution. It is 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 21CFR 177.1520.

Typical Properties¹

	Values		ASTM Method
	English Units	SI Units	
Density	—	0.953 g/cc	D 4883
Melt Index ²	—	6.0 g/10 min	D 1238
Tensile Strength			
@ Yield (2 in/min)	3900 psi	26.9 MPa	D 638
Elongation			
@ Break (2 in/min)	800%	800%	D 638
Flexural Modulus ³	185,000 psi	1,276 MPa	D 790
Notched Izod Impact Strength	1.2 lbf/in	64 J/m	D 256
Hardness (Shore D)	65	65	D 2240
Vicat Softening Point	262 °F	128 °C	D 1525
Brittleness Temperature	<-103 °F	<-75 °C	D 746
Deflection Temperature @ 66 psi	178 °F	81 °C	D 648
ESCR ⁴	6.5 hrs	6.5 hrs	D 1693

¹ Typical properties will vary within specification limits.

² 190° C/2160 g

³ Tangent-Method

⁴ Condition B, 10%, F50