T50-500-171 Polyethylene Copolymer

T50-500-171 is a high density polyethylene copolymer with 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 Properties[1]

	Values		ASTM
	English Units	SI Units	Method
Resin			
Density	–	0.953 g/cc	**D4883**
Melt Index 190 C/2.16 kg	–	6.5 g/10 min	**D1238**
Compression Molded Samples			
Tensile Strength (2 in/min)			**D638**
@ Yield	4,000 psi	27.4 MPa	
@ Break	2,900 psi	20.0 MPa	
Elongation (2 in/min)			**D638**
@ Yield	9.5 %	9.5 %	
@ Break	1,080 %	1,080 %	
Flexural Modulus			**D790A**
2% Secant Method	143,000 psi	988 MPa	
Notched Izod Impact Strength	0.8 ft-lbf/in	4.4 kJ/m^2	**D256**
Hardness			**D2240**
Shore D	63	63	
Vicat Softening Point	257 F	125 C	**D1525**
Brittleness Temperature	<-103 F	<-75 C	**D746**
Heat Deflection Temperature			**D648**
@ 66 psi (455 kPa)	170 F	77 C	
Environmental Stress Crack Resistance			**D1693**
Condition B, 100% Igepal, F50 (hrs.)	5	5	
Oxidation Induction Time @ 210 °C			**D3895**
@210 C	>9 min	>9 min	

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

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