

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 Properties¹

	Values		ASTM Method
	English Units	SI Units	
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	
Tangent Method	185,800 psi	1281 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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Regulatory Information

The product and uses described herein may require global product registrations and notifications for chemical inventory listings, or for use in food contact or medical devices. For further information, call + 1-800-527-5419.

Health and Safety Information

The product described herein may require precautions in handling and use because of toxicity, flammability, or other consideration. The Material Safety Data Sheet (MSDS) contains the available product health and safety information for this material and can be found at www.ineos-op.com. Before using any material, a customer is advised to consult the MSDS for the product under consideration for use.

The Material Safety Data Sheet for this product contains shipping descriptions and should be consulted, before transportation, as a reference in determining the proper shipping description. If the material shipped by INEOS is altered or modified, different shipping descriptions may apply and the MSDS of the original material should not be used.

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