

G50-100 Polyethylene Copolymer

G50-100 is a high molecular weight, high density polyethylene copolymer developed for sheet extrusion, thermoforming, and large part blow molding where the finished product demands outstanding physical performance. 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	—	0.950 g/cc	D4883
Melt Index 190 C/21.6 kg	—	10.0 g/10 min	D1238
Compression Molded Samples			
Tensile Strength (2 in/min)			D638
@ Yield	3,750 psi	26.1 MPa	
@ Break	5,200 psi	36.0 MPa	
Elongation (2 in/min)			D638
@ Yield	10%	10%	
@ Break	920%	920%	
Flexural Modulus			D790A
Tangent Method	177,000 psi	1,220 MPa	
2% Secant Method	137,300 psi	950 MPa	
Notched Izod Impact Strength	7.7 ft-lbf/in	40.5 kJ/m ²	D256
Hardness			D2240
Shore D	67	67	
Vicat Softening Point	259 F	126 C	D1525
Brittleness Temperature	<-103 F	<-75 C	D746
Heat Deflection Temperature			D648
@ 66 psi (455 kPa)	161 F	72 C	
Environmental Stress Crack Resistance			D1693
Condition B, 100% Igepal, F50 (hrs.)	264	264	
Oxidation Induction Time	>21 min	>21 min	D3895
@ 210 C			

¹ 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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