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 Properties[1]

	Values		ASTM
	English Units	SI Units	Method
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			**D3895**
@ 210 C	>21 min	>21 min	

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

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2600 South Shore Boulevard, Ste. 500
League City, TX 77573
Tel: 281-535-6600
www.ineos-op.com

INEOS Olefins & Polymers USA

Manufacturer website: https://www.ineos.com/businesses/ineos-olefins-polymers/

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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.

For additional information, samples, pricing and availability, please contact:

INEOS Olefins & Polymers, USA
Marina View Building
2600 South Shore Boulevard
Suite 500
League City, Texas 77573
Phone: +1 281 535 6600
Fax: +1 281 535 6764
Customer Service: +1 800 527 5419
Tech Service: +1 800 338 0489
www.ineos-op.com

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