

# 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 21CFR 177.1520.

## Typical Properties<sup>1</sup>

	Values		ASTM Method
	English Units	SI Units	
Density	—	0.950 g/cc	D 4883
Melt Index <sup>2</sup>	—	10.0 g/10 min	D 1238
Tensile Strength			
@ Yield (2 in/min)	3800 psi	26.2 MPa	D 638
@ Break (2 in/min)	4400 psi	30.3 MPa	D 638
Elongation			
@ Break (2 in/min)	>800%	>800%	D 638
Tensile Modulus of Elasticity <sup>3</sup>	180,000 psi	1241 MPa	D 638
Flexural Modulus <sup>3</sup>	175,000 psi	1205 MPa	D 790
Tensile Impact <sup>4</sup>	250 ft-lb/in <sup>2</sup>	525 kJ/m <sup>2</sup>	D 1822
Hardness (Shore D)	65	65	D 2240
Vicat Softening Point	266 °F	130 °C	D 1525
Brittleness Temperature	<-103 °F	<-75 °C	D 746
Deflection Temperature @ 66 psi	158 °F	70 °C	D 648
Coefficient of Linear Thermal Expansion	0.00007 in/in/°F	0.00012 cm/cm/°C	D 696

<sup>1</sup> Typical properties will vary within specification limits.

<sup>2</sup> 190° C/21600 g

<sup>3</sup> Tangent-Method

<sup>4</sup> Type L

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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, please refer to the Regulatory Position Statement (RPS) online at [www.ineos-op.com](http://www.ineos-op.com), or 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](http://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 O&P 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:

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