

# 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<sup>1</sup>

	Values		ASTM Method
	English Units	SI Units	
<b>Resin</b>			
Density	—	0.950 g/cc	D4883
Melt Index 190 C/21.6 kg	—	10.0 g/10 min	D1238
<b>Compression Molded Samples</b>			
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 <sup>2</sup>	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	

<sup>1</sup> Properties will vary and are not to be used for specification purposes.