

## High Density Polyethylene GF4950

**Description:**

GF4950 is a high density polyethylene copolymer, developed for the blow-molding segment. It shows well balanced properties between impact and stiffness, combined with high environmental stress cracking resistance and processability.

**Applications:**

Bottles for cleaning products, food packing, surface-active agents, cosmetics and lubricants;  
Blends for irrigation pipes.

**Additives:**

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**Process:**

Blow Molding;  
Injection Blow Molding.

**Control Properties:**

	ASTM Methods	Units	Values
Melt Flow Rate (190/2.16)	D 1238	g/10 min	0.36
Melt Flow Rate (190/21.6)	D 1238	g/10 min	28
Density	D 792	g/cm <sup>3</sup>	0.956

**Typical Properties:**

Plaque Properties<sup>a</sup>

	ASTM Methods	Units	Values
Tensile Strength at Break	D 638	MPa	30
Flexural Modulus – 1% Secant	D 790	MPa	1350
Izod Impact Strength	D 256	J/m	150
Environmental Stress Cracking Resistance <sup>b</sup>	D 1693	h/F50	40
Environmental Stress Cracking Resistance <sup>c</sup>	D 1693	h/F50	70
Deflection Temperature under Load at 0.455 MPa	D 648	°C	70

(a) Test specimens prepared from compression molded sheet made according to ASTM D 4703.

(b) Compression molded 2 mm thickness, 0.3 mm notched-plaques. 10% Igepal. 50°C.

(c) Compression molded 2 mm thickness, 0.3 mm notched-plaques. 100% Igepal. 50°C.

**Recommended Processing Conditions:**
**Temperature Profile:**

- Feeding Zone: 180°C
- Barrel: 180°C, 185°C, 190°C
- Die: 185°C

