

HP55-25-155 Polyethylene Copolymer

HP55-25-155 is a high performance high density polyethylene copolymer for use in blow molding applications requiring a good balance of stiffness and environmental stress crack resistance (ESCR). This product meets the Food and Drug Administration requirements of 21CFR 177.1520.

Typical Properties¹

	Values		ASTM Method
	English Units	SI Units	
Resin			
Density	—	0.955 g/cc	D4883
Melt Index 190°C/2.16 kg	—	0.22 g/10 min	D1238
Compression Molded Samples			
Tensile Strength (2 in/min)			D638
@ Yield	4,100 psi	28.3 MPa	
@ Break	4,300 psi	29.6 MPa	
Elongation (2 in/min)			D638
@ Yield	10%	10%	
@ Break	850%	850%	
Flexural Modulus			D790A
Tangent Method	205,000 psi	1140 MPa	
2% Secant Method	160,000 psi	940 MPa	
Notched Izod Impact Strength	2.6 ft-lbf/in	13.7 kJ/m ²	D256
Hardness (Shore D)	64	64	D2240
Vicat Softening Point	260 F	127 C	D1525
Brittleness Temperature	<-103 F	<-75 C	D746
Heat Deflection Temperature			D648
@ 66 psi (455 kPa)	160 F	71 C	
@ 264 psi (1,820 kPa)	118 F	48 C	
Environmental Stress Crack Resistance			D1693
Condition B, 100% Igepal F50 (hrs.)	80	80	

¹ Typical properties will vary and are not to be used for specification purposes.