

K44-11-128 Polyethylene Copolymer

K44-11-128 is a high molecular weight, high density polyethylene copolymer for large part blow molding. It combines excellent processability and outstanding physical performance, particularly environmental stress crack resistance (ESCR) and impact properties. This resin meets the Food and Drug Administration requirements of 21CFR 177.1520.

Typical Properties¹

	Values		ASTM Method
	English Units	SI Units	
Resin			
Density	—	0.947 g/cc	D4883
Melt Index 190°C/ 21.6 kg	—	12.0 g/10 min	D1238
Compression Molded Samples			
Tensile Strength (2 in/min)			D638
@ Yield	3,500 psi	24.1 MPa	
@ Break	5,500 psi	37.9 MPa	
Elongation (2 in/min)			D638
@ Yield	10.5 %	10.5 %	
@ Break	900 %	900 %	
Flexural Modulus			D790A
Tangent Method	164,000 psi	1130 MPa	
2% Secant Method	122,000 psi	841 MPa	
Notched Izod Impact Strength	5.8 ft-lbf/in	30.3 kJ/m ²	D256
Hardness (Shore D)	63	63	D2240
Vicat Softening Point	253 F	123 C	D1525
Brittleness Temperature	<-103 F	<-75 C	D746
Heat Deflection Temperature			D648
@ 66 psi (455 kPa)	149 F	65 C	
@ 264 psi (1,820 kPa)	113 F	45 C	
Environmental Stress Crack Resistance			D1693
Condition B, 100% Igepal, F50 (hrs.)	>2,000	>2,000	

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