

J50-200-178 Polyethylene Copolymer

J50-200-178 is a high density polyethylene copolymer intended for the injection molding of closures for beverages. Because of its high purity and excellent organoleptic properties, this grade is certified as low taste and is intended for packaging in direct contact with beverages. This material meets the Food and Drug Administration requirements of 21 CFR 177.1520.

Typical Properties¹

	Values		ASTM Method
	English Units	SI Units	
Resin			
Density	—	0.9520 g/cc	D4883
Melt Index 190 C/2.16 kg	—	2.00 g/10 min	D1238
Compression Molded Sample			
Tensile Strength (2 in/min)			D638
@ Yield	4,000 psi	27.5 MPa	
@ Break	5,100 psi	35.0 MPa	
Elongation (2 in/min)			D638
@ Yield	9.1 %	9.1 %	
@ Break	1355 %	1355 %	
Flexural Modulus			D790A
Tangent Method	178,700 psi	1,230 MPa	
Notched Izod Impact Strength	2.16 ft-lbf/in	11.31 kJ/m ²	D256
Hardness			D2240
Shore D	68	68	
Vicat Softening Point	262 F	128 C	D1525
Brittleness Temperature	<-94 F	<-70 C	D746
Heat Deflection Temperature			D648
@ 66 psi (455 kPa)	160 F	71 C	
Environmental Stress Crack Resistance			D1693
Condition B, 100% Igepal F50 (hrs.)	16.5	16.5	

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