# J50-1000-178 Polyethylene Copolymer

J50-1000-178 is a narrow molecular weight high density polyethylene copolymer intended for the production of closures for beverages by either compression or injection molding. Because of its high purity and excellent organoleptic properties, this grade is certified as low taste and is intended for use in direct contact with beverages. Typical applications include caps and closures for carbonated beverages and water. This material meets the Food and Drug Administration requirements of 21 CFR 177.1520.

## **Typical Properties**<sup>1</sup>

	Values		ASTM
	<b>English Units</b>	SI Units	Method
Resin	-		
Density	_	0.951 g/cc	D4883
Melt Index 190 C/ 2.16 kg	—	11 g/10 min	D1238
<b>Compression Molded Sample</b>			
Tensile Strength (2 in/min)			D638
@ Yield	4,000 psi	28.0 MPa	
@ Break	1,650 psi	11.0 MPa	
Elongation (2 in/min)			D638
@ Yield	9.5 %	9.5 %	
@ Break	> 800 %	> 800 %	
Flexural Modulus			D790A
Tangent Method	173,000 psi	1,193 MPa	
Notched Izod Impact Strength	0.7 ft-lbf/in	$3.7 \text{ kJ/m}^2$	D256
Hardness		·	D2240
Shore D	66	66	
Vicat Softening Point	253 F	123 C	D1525
Brittleness Temperature	<-94 F	<-70 C	D746
Deflection Temperature			D648
@ 66 psi (455 kPa)	163 F	73 C	
Environmental Stress Crack Resistance			D1693
Condition B, 100% Igepal, F50 (hrs.)	4	4	

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

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### **Regulatory Information**

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The Material Safety Data Sheet for this product contains shipping descriptions and should be consulted, before transportation, as a reference in determining the proper shipping description. If the material shipped by INEOS is altered or modified, different shipping descriptions may apply and the MSDS of the original material should not be used.

For additional information, samples, pricing and availability, please contact:

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