

B50-35H-176 Polyethylene Copolymer

B50-35H-176 is a high density polyethylene copolymer developed for blow molding. It is recommended for use in applications which require a combination of high top load strength and good environmental stress crack resistance (ESCR). This material contains a fully FDA sanctioned antistat and meets the Food and Drug Administration requirements of 21CFR 177.1520.

Typical Properties¹

	Values		ASTM Method
	English Units	SI Units	
Resin			
Density	—	0.951 g/cc	D4883
Melt Index 190°C/2.16 kg	—	0.35 g/10 min	D1238
Compression Molded Samples			
Tensile Strength (2 in/min)			D638
@ Yield	3,700 psi	25.5 MPa	
@ Break	3,000 psi	18.6 MPa	
Elongation (2 in/min)			D638
@ Yield	10%	10%	
@ Break	>600%	>600%	
Flexural Modulus			D790A
Tangent Method	180,000 psi	1,116 MPa	
2% Secant Method	135,000 psi	837 MPa	
Notched Izod Impact Strength	2.75 ft-lbf/in	14.4 kJ/m ²	D256
Hardness (Shore D)	64	64	D2240
Vicat Softening Point	257 F	125 C	D1525
Brittleness Temperature	<-103 F	<-75 C	D746
Heat Deflection Temperature			D648
@ 66 psi (455 kPa)	162 F	72 C	
@ 264 psi (1,820 kPa)	113 F	45 C	
Environmental Stress Crack Resistance			D1693
Condition B, 100% Igepal F50 (hrs.)	40 hrs	40 hrs	

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

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Regulatory Information

The product and uses described herein may require global product registrations and notifications for chemical inventory listings, or for use in food contact or medical devices. For further information, call + 1-800-527-5419.

Health and Safety Information

The product described herein may require precautions in handling and use because of toxicity, flammability, or other consideration. The Material Safety Data Sheet (MSDS) contains the available product health and safety information for this material and can be found at www.ineos-op.com. Before using any material, a customer is advised to consult the MSDS for the product under consideration for use.

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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