

HP53-25-155 Polyethylene Copolymer

HP53-25-155 is a high performance high density polyethylene copolymer developed for blow molding. It is recommended for use in continuous extrusion blow molding equipment, specifically where applications require excellent environmental stress crack resistance (ESCR). This material meets the Food and Drug Administration requirements of 21CFR 177.1520.

Typical Properties¹

	Values		ASTM Method
	English Units	SI Units	
Density	—	0.952 g/cc	D 4883
Melt Index ²	—	0.22 g/10 min	D 1238
Tensile Strength			
@ Yield (2 in/min)	3700 psi	25.5 MPa	D 638
Elongation			
@ Break (2 in/min)	>700%	>700%	D 638
Flexural Modulus ³	165,000 psi	1138 MPa	D 790
Flexural Modulus ⁴	135,000 psi	931 MPa	D 790
Notched Izod Impact Strength	3.2 ft-lbf/in	0.17 kJ/m	D 256
Tensile Impact Strength	149 ft-lbf/in ²	313 kJ/m ²	D 1822
Hardness (Shore D)	64	64	D 2240
Vicat Softening Point	264 °F	129 °C	D 1525
Brittleness Temperature	<-103 °F	<-75 °C	D 746
Deflection Temperature @66 psi	160 °F	71 °C	D 648

¹ Typical properties will vary within specification limits.

² 190° C/2160 g

³ Tangent-Method

⁴ 2% Secant-Method 1

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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, please refer to the Regulatory Position Statement (RPS) online at www.ineos-op.com, or 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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