

# HP53-25-155 Polyethylene Copolymer

HP53-25-155 is a high performance high density polyethylene copolymer for use in blow molding applications requiring excellent environmental stress crack resistance (ESCR). This product meets the Food and Drug Administration requirements of 21CFR 177.1520.

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

	Values		ASTM Method
	English Units	SI Units	
<b>Resin</b>			
Density	—	0.952 g/cc	D4883
Melt Index 190 C/2.16 kg	—	0.22 g/10 min	D1238
<b>Compression Molded Samples</b>			
<b>Tensile Strength (2 in/min)</b>			D638
@ Yield	3,900 psi	26.9 MPa	
@ Break	4,000 psi	27.6 MPa	
<b>Elongation (2 in/min)</b>			D638
@ Yield	10%	10%	
@ Break	>700%	>700%	
<b>Flexural Modulus</b>			D790A
Tangent Method	180,000 psi	1240 MPa	
2% Secant Method	136,000 psi	940 MPa	
<b>Notched Izod Impact Strength</b>	3.0 ft-lbf/in	15.8 kJ/m <sup>2</sup>	D256
<b>Hardness (Shore D)</b>	65	65	D2240
<b>Vicat Softening Point</b>	257 F	125 C	D1525
<b>Brittleness Temperature</b>	<-103 F	<-75 C	D746
<b>Heat Deflection Temperature</b>			D648
@ 66 psi (455 kPa)	156 F	69 C	
@ 264 psi (1,820 kPa)	113 F	45 C	
<b>Environmental Stress Crack Resistance</b>			D1693
Condition B, 100% Igepal F50 (hrs.)	200	200	

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

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Olefins & Polymers USA



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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](http://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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