

HB111R Polyethylene Copolymer

HB111R is a natural high molecular weight, high-density copolymer polyethylene developed for automotive fuel tanks. It combines excellent processability and outstanding physical performance, particularly environmental stress crack resistance (ESCR) and impact properties. Its high melt strength aids the continuous extrusion production of multi-layer tanks

Typical Properties¹

	Values		ASTM Method
	English Units	SI Units	
Density	—	0.945 g/cc	D 4883
Melt Index ²	—	6.0 g/10 min	D 1238
Tensile Strength			
@ Yield (2 in/min)	3500 psi	24.0 MPa	D 638
Elongation			
@ Break (2 in/min)	800%	800%	D 638
Flexural Modulus ³	119,000 psi	820 MPa	D 790
Notched Izod Impact Strength ⁴	7 ft-lbf/in	34 kJ/m ²	D 256
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	158 °F	69 °C	D 648

¹ Typical properties will vary within specification limits.

² 190° C/21600 g.

³ Secant - 2% strain

⁴ Partial break

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