

Polyintec® APC800-MI

High-Density Polyethylene Homopolymer for Injection Molding

Product Description:

Polyintec® APC800-MI is a narrow molecular weight distribution, high-density polyethylene (HDPE) homopolymer specifically designed for general-purpose injection molding applications. It offers excellent rigidity, a glossy surface finish, and good processability. Polyintec® APC800-MI meets the Food and Drug Administration requirements of 21 CFR 177.1520, making it suitable for applications requiring food contact compliance.

Suggested Applications:

Housewares, Caps and Closures, Toys, General Purpose Containers, Industrial Components

Nominal Physical Properties:

Property	Value (English Units)	Value (SI Units)	ASTM Method
Resin			
Density	0.960 g/cc	0.960 g/cc	D4883
Melt Index (190°C/2.16 kg)	12 g/10 min	12 g/10 min	D1238
Compression Molded Samples			
Tensile Strength @ Yield	4,200 psi	28.9 MPa	D638
Tensile Strength @ Break	1,700 psi	11.7 MPa	D638
Elongation @ Yield	8.0 %	8.0 %	D638
Elongation @ Break	> 300 %	> 300 %	D638
Flexural Modulus (Tangent)	240,000 psi	1,650 MPa	D790A
Notched Izod Impact Strength	0.7 ft-lbf/in	3.5 kJ/m²	D256
Hardness (Shore D)	70	70	D2240
Vicat Softening Point	253 °F	123 °C	D1525
Brittleness Temperature	<-94 °F	< -70 °C	D746
Heat Deflection Temp. (@ 66 psi)	174 °F	79 °C	D648
ESCR (Condition B, 100% Igepal)	F50 (hrs.) 3	F50 (hrs.) 3	D1693

Important Note:

The properties listed above are typical values obtained under laboratory conditions and are not intended to be used as specifications. Test specimens were prepared via compression molding. These values are provided for informational purposes only and should not be interpreted as absolute guarantees of performance in all applications. Users should conduct their own testing to determine the suitability of Polyintec® APC800-MI for their specific application and processing conditions.