



Polyintec® APC2050-MI

High Density Polyethylene for Injection Molding (HDPE-IM)

Product Description:

Polyintec® APC2050-MI is a prime, narrow molecular weight high-density polyethylene (HDPE) copolymer designed for injection molding applications requiring a glossy finish, good impact strength, and rigidity. Its high melt index enables easy processing of medium to thin-walled articles. This material meets FDA requirements of 21 CFR 177.1520.

Suggested Applications:

Injection molded parts, glossy finish products, Medium to thin walled articles, and applications requiring a good balance of properties.

Nominal Physical Properties:

PROPERTY	ASTM TEST METHOD	UNIT	VALUE
Melt Index	D1238	g/10 min	20.0
Density	D4883	g/cc	0.9530
Tensile Strength @ Yield	D638	MPa (psi)	27.6 (4000)
Tensile Strength @ Break	D638	MPa (psi)	14.8 (2140)
Elongation @ Yield	D638	%	9.1
Elongation @ Break	D638	%	>200
Flexural Modulus (2% Secant)	D790A	MPa (psi)	1227(178900)
Flexural Modulus (Tangent)	D790A	Mpa (psi)	1281(185800)
Notched Izod Impact Strength	D256	kJ/m ² (ft-lbf/in)	2.77(0.53)
Hardness (Shore D)	D2240	-	66
Vicat Softening Point	D1525	°C (°F)	125 (257)
Brittleness Temperature	D746	°C (°F)	<-70 (<-94)
Heat Deflection Temp. @ 66psi	D648	°C (°F)	72 (162)
ESCR, Cond. B, 100% Igepal, F50	D1693	hrs	1.8

Important Note:

The properties listed above are typical values obtained under laboratory conditions and are not intended to be used as specifications. Users should perform their own tests to determine the suitability of this product for their particular purposes. The information is only the opinion of the manufacturer, with no warranty.