

## Polyintec® APC550-MI

High Density Polyethylene Injection Molding (HDPE-IM)

### Product Description:

Polyintec® APC550-MI is a prime, high-density polyethylene copolymer with a narrow molecular weight distribution, designed specifically for injection molding applications. It provides an excellent balance of processability and end-use performance properties, making it suitable for a variety of applications. This material meets the Food and Drug Administration requirements of 21CFR 177.1520.

### Suggested Applications:

Injection molding applications requiring good processability and end use properties.

### Nominal Physical Properties:

PROPERTY	ASTM TEST METHOD	UNIT	VALUE
Melt Index	D1238	g/10 min.	6.0
Density	D4883	g/cc	0.953
Tensile Strength @ Yield	D638	MPa (psi)	27.4 (4000)
Tensile Strength @ Break	D638	MPa (psi)	20.0 (2900)
Elongation @ Yield	D790A	%	9.5
Elongation @ Break	D790A	%	1080
Flexural Modulus (2% Secant)	D790A	MPa (psi)	988 (143000)
Flexural Modulus (Tangent)	D790A	Mpa (psi)	1281(185800)
Notched Izod Impact Strength	D256	kJ/m <sup>2</sup> (ft-lbf/in)	4.4 (0.8)
Hardness (Shore D)	D2240		63
Vicat Softening Point	D1525	°C (°F)	125 (257)
Brittleness Temperature	D746	°C (°F)	<-70 (<-103)

### Important Note:

The properties listed above are typical values obtained under laboratory conditions and are not intended to be used as specifications. The information is based on the AMERICOLENE® APC550-IM data sheet (Published 02/01/13, Revised 11/10/21) and should be independently verified for Polyintec® APC550-MI. Users should perform their own tests.