

HiFill® PA6 IM X

Techmer Polymer Modifiers - *Polyamide 6*

General Information

General

Material Status	• Commercial: Active
Availability	• North America
Additive	• Heat Stabilizer • Impact Modifier • Lubricant
Features	• Heat Stabilized • Impact Modified • Lubricated
Appearance	• Colors Available
Forms	• Pellets
Processing Method	• Injection Molding

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.06		ASTM D792
Molding Shrinkage - Flow (0.125 in)	0.013	in/in	ASTM D955
Water Absorption (24 hr)	1.5	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength	7300	psi	ASTM D638
Tensile Elongation (Yield)	200	%	ASTM D638
Flexural Modulus	250000	psi	ASTM D790
Flexural Strength (Yield)	9500	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F, 0.125 in)	16	ft·lb/in	ASTM D256
Unnotched Izod Impact (0.125 in)	No Break		ASTM D4812
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	105		ASTM D785
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	330	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	125	°F	ASTM D648
CLTE - Flow	5.5E-5	in/in/°F	ASTM D696
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	2.0E+13	ohms·cm	ASTM D257
Dielectric Strength (Method A (Short-Time))	420	V/mil	ASTM D149

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	180	°F
Drying Time	2.0 to 4.0	hr
Suggested Max Moisture	0.10	%
Rear Temperature	490 to 555	°F
Middle Temperature	490 to 555	°F
Front Temperature	490 to 555	°F
Processing (Melt) Temp	460 to 530	°F
Mold Temperature	150 to 180	°F
Back Pressure	50.0 to 100	psi
Screw Speed	30 to 60	rpm

