

HiFill® PA6 GF15 IM1

 Techmer Polymer Modifiers - *Polyamide 6*
General Information
General

Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Glass Fiber, 15% Filler by Weight
Additive	• Heat Stabilizer • Impact Modifier • Lubricant
Features	• Heat Stabilized • High Impact Resistance • Lubricated
Appearance	• Colors Available
Forms	• Pellets
Processing Method	• Injection Molding

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.23		ASTM D792
Molding Shrinkage - Flow (0.125 in)	3.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.20	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Break)	13000	psi	ASTM D638
Tensile Elongation (Break)	4.5	%	ASTM D638
Flexural Modulus	600000	psi	ASTM D790
Flexural Strength	25000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact			ASTM D256
-4°F, 0.125 in	1.7	ft·lb/in	
73°F, 0.125 in	3.9	ft·lb/in	
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	112		ASTM D785
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	415	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	380	°F	ASTM D648
CLTE - Flow	1.0E-5	in/in/°F	ASTM D696
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	1.0E+15	ohms·cm	ASTM D257
Dielectric Strength (Method A (Short-Time))	400	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	510 to 530	°F
Middle Temperature	530 to 550	°F
Front Temperature	520 to 540	°F
Nozzle Temperature	520 to 540	°F
Processing (Melt) Temp	530 to 550	°F
Mold Temperature	175 to 220	°F
Injection Rate	Slow-Moderate	
Back Pressure	0.00 to 50.0	psi

Injection Notes


Screw Speed: Medium

Recommendations for Molding and Tool Conditions: Well vented mold

Moisture Content, as received: Product is packaged at 0.2% or less.

Notes

¹ Typical properties: these are not to be construed as specifications.

