

HiFill® PA6/6 E4 IM

Techmer Polymer Modifiers - Polyamide 66

General

Material Status	• Commercial: Active
Availability	• North America
Features	• Good Toughness • High Viscosity
Appearance	• Colors Available
Forms	• Pellets
Processing Method	• Extrusion

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.14		ASTM D792
Molding Shrinkage - Flow (0.125 in)	0.018	in/in	ASTM D955
Water Absorption (24 hr)	1.2	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield)	11600	psi	ASTM D638
Tensile Elongation (Break)	80	%	ASTM D638
Flexural Modulus	390000	psi	ASTM D790
Flexural Strength	18000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (0.125 in)	1.5	ft-lb/in	ASTM D256
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)	459	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	180	°F	ASTM D648
CLTE - Flow	4.3E-5	in/in/°F	ASTM D696
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	1.0E+13	ohms-cm	ASTM D257
Dielectric Strength (Method A (Short-Time))	450	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	0.12	%
Rear Temperature	540 to 560	°F
Middle Temperature	550 to 570	°F
Front Temperature	530 to 550	°F
Nozzle Temperature	540 to 560	°F
Processing (Melt) Temp	540 to 580	°F
Mold Temperature	130 to 200	°F
Injection Rate	Moderate-Fast	
Back Pressure	50.0 to 100	psi

Injection Notes

Screw Speed: Medium
 Recommendations for Molding and Tool Conditions: Well vented
 Moisture Content, as received: Product is packaged at 0.2% or less.
 Recommended Max Moisture: 0.12% down to 0.08%

