HiFill® PA6 GF40 IM HS UV RD

Techmer Polymer Modifiers - *Polyamide 6*

General Information

General	
Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Glass Fiber
Additive	• Impact Modifier
Features	• Impact Modified
UL File Number	• E157318
Appearance	• Colors Available
Forms	• Pellets
Processing Method	• Injection Molding

Properties [1]

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.46		ASTM D792
Molding Shrinkage - Flow (0.125 in)	0.035	in/in	ASTM D955
Water Absorption (24 hr)	0.50	%	ASTM D570
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Strength	25500	psi	ASTM D638
Tensile Elongation (Yield)	4.0	%	ASTM D638
Flexural Modulus	1.20E+6	psi	ASTM D790
Flexural Strength (Yield)	34000	psi	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact			ASTM D256
-40°F, 0.125 in	1.9	ft·lb/in	
73°F, 0.125 in	4.2	ft·lb/in	
Unnotched Izod Impact (0.125 in)	26	ft·lb/in	ASTM D4812
Hardness	**Nominal Value**	**Unit**	**Test Method**
Rockwell Hardness (R-Scale)	120		ASTM D785
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (264 psi, Unannealed)	415	°F	ASTM D648
CLTE - Flow	2.0E-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))	390	V/mil	ASTM D149
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating	HB		UL 94

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.