PolySource

HiFill® PA6/6 GF/M40 HS L BK
Techmer Polymer Modifiers - *Polyamide 66*

General Information

General

Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Glass Fiber\Mineral, 40% Filler by Weight
Additive	• Heat Stabilizer • Lubricant
Features	• Heat Stabilized • Lubricated
Appearance	• Black
Forms	• Pellets
Processing Method	• Injection Molding

Properties [1]

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.42		ASTM D792
Molding Shrinkage - Flow (0.125 in)	3.5E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.50	%	ASTM D570
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Strength (Yield)	16800	psi	ASTM D638
Tensile Elongation (Break)	2.5	%	ASTM D638
Flexural Modulus	1.00E+6	psi	ASTM D790
Flexural Strength	22000	psi	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact (0.125 in)	0.90	ft·lb/in	ASTM D256
Unnotched Izod Impact (0.125 in)	10	ft·lb/in	ASTM D4812
Hardness	**Nominal Value**	**Unit**	**Test Method**
Rockwell Hardness (R-Scale)	121		ASTM D785
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (66 psi, Unannealed)	485	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	445	°F	ASTM D648
CLTE - Flow	9.0E-6	in/in/°F	ASTM D696
Electrical	**Nominal Value**	**Unit**	**Test Method**
Volume Resistivity	8.0E+14	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.
Recomended Max Moisture: 0.12% down to 0.08%

Notes

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