HiFill® PEEK GF30 LSB NAT

Techmer Polymer Modifiers - *Polyetheretherketone*

General Information

Product Description	
PEKM117241	
General	
Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Glass Fiber, 30% Filler by Weight
Features	• Low Warpage
Processing Method	• Injection Molding

Properties [1]

Physical	**Nominal Value**	**Unit**	**Test Method**
Density / Specific Gravity	1.50		ASTM D792
Molding Shrinkage - Flow (0.125 in)	4.0E-3 to 6.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.12	%	ASTM D570
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	1.65E+6	psi	ASTM D638
Tensile Strength (Yield)	22600	psi	ASTM D638
Tensile Strength (Break)	22600	psi	ASTM D638
Tensile Elongation (Break)	2.0	%	ASTM D638
Flexural Modulus	1.52E+6	psi	ASTM D790
Flexural Strength	34700	psi	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact (73°F, 0.125 in)	2.1	ft·lb/in	ASTM D256
Hardness	**Nominal Value**	**Unit**	**Test Method**
Rockwell Hardness (R-Scale)	115		ASTM D785
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (264 psi, Unannealed)	600	°F	ASTM D648
Melting Temperature	648	°F	
CLTE - Flow	1.2E-5	in/in/°F	ASTM D696
Electrical	**Nominal Value**	**Unit**	**Test Method**
Volume Resistivity	1.0E+16	ohms·cm	ASTM D257
Dielectric Strength (Method A (Short-Time))	580	V/mil	ASTM D149
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating (0.06 in)	V-0		UL 94

Processing Information

Injection	**Nominal Value**	**Unit**
Drying Temperature	300	°F
Drying Time	3.0 to 4.0	hr
Suggested Max Moisture	< 0.050	%
Rear Temperature	650 to 700	°F
Middle Temperature	660 to 710	°F
Front Temperature	670 to 720	°F
Nozzle Temperature	680 to 730	°F
Processing (Melt) Temp	660 to 725	°F
Mold Temperature	350 to 400	°F
Back Pressure	0.00 to 50.0	psi