



HiFill® PEEK GF30 A 008

Techmer Polymer Modifiers - *Polyetheretherketone*

Action



General Information

Product Description

1301118

Low Spring Formulation for Back up Rings

General

Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Glass Fiber, 30% Filler by Weight
Processing Method	• Injection Molding

ASTM & ISO 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	1.10E+6	psi	ASTM D638
Tensile Strength (Yield)	17000	psi	ASTM D638
Tensile Strength (Break)	16500	psi	ASTM D638
Tensile Elongation (Break)	3.0	%	ASTM D638
Flexural Modulus	1.47E+6	psi	ASTM D790
Flexural Strength	25000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F, 0.125 in)	1.3	ft·lb/in	ASTM D256
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	115		ASTM D785
Durometer Hardness	87		ASTM D2240
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	640 to 700	°F
Middle Temperature	650 to 710	°F
Front Temperature	655 to 715	°F
Nozzle Temperature	660 to 720	°F
Processing (Melt) Temp	650 to 725	°F
Mold Temperature	300 to 400	°F
Back Pressure	0.00 to 50.0	psi

Notes