KetaSpire® KT-820 GF13

polyetheretherketone

KetaSpire KT-820 is a low flow, 13% glass fiber reinforced grade of polyetheretherketone (PEEK). The glass fiber content is optimized to provide a balance of strength and stiffness with toughness-related properties, such as impact resistance and elongation at break. The low fiberglass loading gives the resin improved surface aesthetics and reduced anisotropy over comparable 30% glass reinforced formulations.

KetaSpire PEEK is produced to the highest industry standards and is characterized by a distinct combination of best-in-class fatigue resistance, ease of melt processing, high purity, and excellent chemical resistance to organics, acids, and bases.

These properties make it well-suited for applications in oil and gas recovery, semiconductor fabrication, automotive, aerospace, healthcare, chemical processing, and other industrial uses.

This resin is opaque and beige to light brown in color in its natural state.

- Beige: KT-820 GF13 BG20

General			
Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • North America	• South America
Filler / Reinforcement	• Glass Fiber Reinforcement, 13% Filler by Weight		
Features	• Fatigue Resistant • Flame Retardant • Good Chemical Resistance	• Good Dimensional Stability • High Heat Resistance • High Stiffness	• High Strength
Uses	• Industrial Applications	• Medical/Healthcare Applications	• Oil/Gas Applications
RoHS Compliance	• Contact Manufacturer		
Appearance	• Beige	• Opaque	
Forms	• Pellets	• Powder	
Processing Method	• Injection Molding	• Machining	• Profile Extrusion

Physical	Typical Value	Unit	Test Method
Specific Gravity	1.38	g/cm³	ASTM D792
Mechanical	**Typical Value**	**Unit**	**Test Method**
Tensile Modulus	5900	MPa	ASTM D638
Tensile Strength	117	MPa	ASTM D638
Tensile Elongation			ASTM D638
Yield	3.9	%	
Break	6.2	%	
Flexural Modulus	5600	MPa	ASTM D790
Flexural Strength	203	MPa	ASTM D790
Impact	**Typical Value**	**Unit**	**Test Method**
Notched Izod Impact	91	J/m	ASTM D256
Unnotched Izod Impact	1000	J/m	ASTM D4218
Thermal	**Typical Value**	**Unit**	**Test Method**
Deflection Temperature Under Load			ASTM D648
1.8 MPa, Unannealed	213	°C	
Fill Analysis	**Typical Value**	**Unit**	**Test Method**
Melt Viscosity (400°C, 1000 sec^-1)	534000	mPa·s	Internal Method

Injection	Typical Value	Unit
Drying Temperature	150	°C
Drying Time	4.0	hr
Rear Temperature	365	°C
Middle Temperature	370	°C
Front Temperature	375	°C
Nozzle Temperature	380	°C
Mold Temperature	175 to 205	°C
Injection Rate	Fast	
Screw Compression Ratio	2.5:1.0 to 3.5:1.0	

Notes

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

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Material Safety Data Sheets (MSDS) are available by emailing us or contacting your sales representative. Always consult the appropriate MSDS before using any of our products.

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