

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	• Latin America • North America
Filler / Reinforcement	• Glass Fiber, 13% Filler by Weight	
Features	• Chemical Resistant • Fatigue Resistant • Flame Retardant • 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
Density / Specific Gravity	1.38		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

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Impact	Typical Value	Unit	Test method
Notched Izod Impact	91	J/m	ASTM D256
Unnotched Izod Impact	1000	J/m	ASTM D4812
Thermal	Typical Value	Unit	Test method
Deflection Temperature Under Load 1.8 MPa, Unannealed	213	°C	ASTM D648
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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