KetaSpire® KT-880 GF30

polyetheretherketone

KetaSpire KT-880 GF30 is the high-flow, 30% glass-fiber reinforced grade of polyetheretherketone (PEEK). This resin offers higher strength and stiffness properties relative to unreinforced KetaSpire PEEK resin. Reinforcement also affords greater mechanical robustness in structural applications, particularly those with service temperatures approaching 300°C.

KetaSpire PEEK is produced to the highest industry standards and is characterized by a distinct combination of properties, which include excellent wear resistance, 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 healthcare, transportation, electronics, chemical processing and other industrial uses.

- Beige: KT-880 GF30 BG 20

General			
Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • North America	• South America
Filler / Reinforcement	• Glass Fiber Reinforcement, 30% Filler by Weight		
Features	• Autoclave Sterilizable • Biocompatible • E-beam Sterilizable • Ethylene Oxide Sterilizable • Fatigue Resistant • Flame Retardant • Good Chemical Resistance	• Good Dimensional Stability • Good Sterilizability • Heat Sterilizable • High Flow • High Heat Resistance • High Stiffness • High Strength	• Radiation (Gamma) Resistant • Radiation Sterilizable • Radiotranslucent • Steam Resistant • Steam Sterilizable
Uses	• Aircraft Applications • Connectors • Dental Applications • Electrical/Electronic Applications • Film	• Hospital Goods • Industrial Applications • Medical Appliances • Medical/Healthcare Applications • Oil/Gas Applications	• Pump Parts • Seals • Surgical Instruments
Agency Ratings	• ISO 10993	• ISO 10993-Part 1	
RoHS Compliance	• RoHS Compliant		
Appearance	• Light Beige		
Forms	• Pellets		
Processing Method	• Injection Molding	• Machining	• Profile Extrusion

Physical	Typical Value	Unit	Test Method
Specific Gravity	1.53	g/cm³	ASTM D792
Melt Mass-Flow Rate (MFR) (400°C/2.16 kg)	14	g/10 min	ASTM D1238
Molding Shrinkage [1]			ASTM D955
Flow: 3.18 mm	0.20	%	
Across Flow: 3.18 mm	1.4	%	
Water Absorption (24 hr)	0.10	%	ASTM D570
Mechanical	**Typical Value**	**Unit**	**Test Method**
Tensile Modulus	10800	MPa	ASTM D638
Tensile Strength	162	MPa	ASTM D638

Mechanical	Typical Value	Unit	Test Method
Tensile Elongation [2] (Break)	2.8	%	ASTM D638
Flexural Modulus	10500	MPa	ASTM D790
Flexural Strength	260	MPa	ASTM D790
Impact	**Typical Value**	**Unit**	**Test Method**
Notched Izod Impact	69	J/m	ASTM D256
Unnotched Izod Impact	850	J/m	ASTM D256
Thermal	**Typical Value**	**Unit**	**Test Method**
Deflection Temperature Under Load			ASTM D648
1.8 MPa, Annealed	315	°C	
Glass Transition Temperature (DSC)	147	°C	ASTM D3418
Melting Temperature	343	°C	ASTM D3418
CLTE - Flow (-50 to 50°C)	0.000019	cm/cm/°C	ASTM E831
Fill Analysis	**Typical Value**	**Unit**	**Test Method**
Melt Viscosity (400°C, 1000 sec^-1)	350	Pa·s	ASTM D3835

Injection	Typical Value	Unit
Drying Temperature	150	°C
Drying Time	4.0	hr
Rear Temperature	365	°C
Middle Temperature	371	°C
Front Temperature	377	°C
Nozzle Temperature	382	°C
Mold Temperature	177 to 204	°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.

[1] 5" x 0.5" x 0.125"

[2] Crystallized

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SOLVAY

For assistance with an emergency involving products of Solvay Advanced Polymers, such as a spill, leak, fire, or explosion, call day or night:

Emergency Health Information

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For additional product information, technical assistance, and Material Safety Data Sheets (MSDS), call:

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Material Safety Data Sheets (MSDS) for products of Solvay Advanced Polymers are available upon request from your sales representative or by emailing us at advancedpolymers@solvay.com. Always consult the appropriate MSDS before using any of our products.

Property values for individual batches will vary within specification limits. Unless otherwise noted, values shown are typical for uncolored resin; colorants may alter values. For Preliminary Data Sheets, values are typical of limited production and specifications are not yet established.

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