KetaSpire® KT-820FP
polyetheretherketone

KetaSpire® KT-820FP is the low-flow grade of unreinforced polyetheretherketone (PEEK) supplied in a natural-color fine powder form suitable for compression molding.

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.

The resin is also available as KetaSpire® KT-820 NT in a natural-color pellet form for injection molding and extrusion.

General		
Material Status	• Commercial: Active	
Availability	• Africa & Middle East • Asia Pacific • Europe	• Latin America • North America
Features	• Chemical Resistant • Ductile • Fatigue Resistant • Flame Retardant	• Good Dimensional Stability • Good Impact Resistance • High Heat Resistance
Uses	• Electrical/Electronic Applications • Industrial Applications	• Oil/Gas Applications
Agency Ratings	• ISO 10993	
RoHS Compliance	• Contact Manufacturer	
Appearance	• Natural Color	
Forms	• Powder	
Processing Method	• Compression Molding	

Physical	Typical Value	Unit	Test method
Density / Specific Gravity	1.30		ASTM D792
Melt Mass-Flow Rate (MFR) (400°C/2.16 kg)	3.0	g/10 min	ASTM D1238
Water Absorption (24 hr)	0.10	%	ASTM D570
Particle Size			
Retained on 100 mesh sieve	< 0.00	%	
Retained on 140 mesh sieve	< 2.00	%	

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Mechanical	Typical Value	Unit	Test method
Tensile Modulus	3650	MPa	ASTM D638
Tensile Strength	96.5	MPa	ASTM D638
Tensile Elongation			ASTM D638
Yield	5.2	%	
Break [1]	> 60	%	
Break [2]	20 to 30	%	
Flexural Modulus	3860	MPa	ASTM D790
Flexural Strength	152	MPa	ASTM D790

Impact	Typical Value	Unit	Test method
Notched Izod Impact	69	J/m	ASTM D256
Unnotched Izod Impact	No Break		ASTM D4812

Thermal	Typical Value	Unit	Test method
Deflection Temperature Under Load			ASTM D648
1.8 MPa, Unannealed	162	°C	
Glass Transition Temperature	150	°C	ASTM D3417
Melting Temperature	340	°C	ASTM D3417
CLTE - Flow (-50 to 50°C)	4.3E-5	cm/cm/°C	ASTM E831

Fill Analysis	Typical Value	Unit	Test method
Melt Viscosity (400°C, 1000 sec^-1)	420	Pa·s	ASTM D3835

Injection Notes
Back Pressure: minimum

Notes

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

[1] Quenched

[2] Crystallized

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