

KetaSpire® KT-820SFP

polyetheretherketone

KetaSpire® KT-820SFP is the low flow grade of unreinforced polyetheretherketone (PEEK) supplied in a natural-colored, super-fine powder form. This super-fine PEEK powder is suitable for water-borne coatings, electrostatically driven powder coatings, and resin pre-impregnation of continuous fiber composites. This super-fine powder is produced to a median particle size D50 of about 30 micrometers.

KetaSpire® PEEK is produced to the highest industry standards and is characterized by a distinct combination of properties, which include excellent chemical resistance to

acids, bases and a broad range of aggressive organic chemicals, best in class fatigue resistance, high thermal resistance, high purity and ease of melt processing.

These properties make KT-820SFP well-suited for applications in health care, transportation, electronics, chemical processing and other industrial uses.

The resin is also available in a natural-colored pellet form under the grade name KT-820 NT 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	• Aerospace Applications • Automotive Applications • Electrical/Electronic Applications	• Industrial Applications • Oil/Gas Applications
RoHS Compliance	• Contact Manufacturer	
Appearance	• Natural Color	
Forms	• Powder	
Processing Method	• Electrostatic Spray Coating	• Water-borne Coating

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			
D50	30.0	µm	
D90	60.0	µm	
D99	125	µm	

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	20 to 30	%	

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Mechanical	Typical Value	Unit	Test method
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 D256

Thermal	Typical Value	Unit	Test method
Deflection Temperature Under Load 1.8 MPa, Unannealed	157	°C	ASTM D648
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 Tensile test speed = 2 in/min (50 mm/min)



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

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