

KetaSpire® KT-880UFP

polyetheretherketone

KetaSpire® KT-880UFP is the high flow grade of unreinforced polyetheretherketone (PEEK) supplied in a natural-colored, ultra-fine powder form. This ultra-fine PEEK powder is suitable for water borne coatings, electrostatically driven powder coatings, and resin pre-impregnation of continuous fiber composites. This ultra fine powder is produced to a median particle size D50 of about 10 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-880UFP 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-880 NT for injection molding applications.

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)	36	g/10 min	ASTM D1238
Water Absorption (24 hr)	0.10	%	ASTM D570
Particle Size			
D50	10.0	µm	
D90	15.0	µm	
D99	22.0	µm	

Mechanical	Typical Value	Unit	Test method
Tensile Modulus	3650	MPa	ASTM D638
Tensile Strength	100	MPa	ASTM D638
Tensile Elongation			ASTM D638
Yield	5.2	%	
Break ¹	10 to 20	%	

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Mechanical	Typical Value	Unit	Test method
Flexural Modulus	3790	MPa	ASTM D790
Flexural Strength	153	MPa	ASTM D790

Impact	Typical Value	Unit	Test method
Notched Izod Impact	53	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	160	°C	ASTM D648
Glass Transition Temperature	147	°C	ASTM D3417
Melting Temperature	343	°C	ASTM D3417
CLTE - Flow (-50 to 50°C)	5.0E-5	cm/cm/°C	ASTM E831

Fill Analysis	Typical Value	Unit	Test method
Melt Viscosity (400°C, 1000 sec ⁻¹)	150	Pa·s	ASTM D3835

Additional Information

D50, median particle size by Microtrac Laser Diffraction, 7.5 to 12.5 microns.

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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