

# KetaSpire® KT-850P

## polyetheretherketone

KetaSpire® KT-850P is the intermediate-flow grade of unreinforced polyetheretherketone (PEEK) supplied in a natural-color coarse powder form. 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.

KetaSpire® KT-850P can be easily processed using typical injection molding and extrusion processes. The resin is also available as KetaSpire® KT-850 NT in a natural-color pellet form.

### General

Material Status	• Commercial: Active	
Availability	• Africa & Middle East • Asia Pacific • Europe	• Latin America • North America
Features	• Chemical Resistant • Fatigue Resistant • Flame Retardant	• Good Dimensional Stability • High Heat Resistance
Uses	• Aircraft Applications • Automotive Applications • Bearings • Bushings • Compounding • Electrical/Electronic Applications	• Film • Industrial Applications • Medical/Healthcare Applications • Oil/Gas Applications • Seals • Tubing
RoHS Compliance	• Contact Manufacturer	
Appearance	• Natural Color	
Forms	• Powder	
Processing Method	• Compression Molding	• Electrostatic Spray Coating

### Physical

	Typical Value	Unit	Test method
Density / Specific Gravity	1.30		ASTM D792
Melt Mass-Flow Rate (MFR) (400°C/2.16 kg)	10	g/10 min	ASTM D1238
Water Absorption (24 hr)	0.10	%	ASTM D570

### 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	20 to 30	%	
Flexural Modulus	3860	MPa	ASTM D790
Flexural Strength	152	MPa	ASTM D790

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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 1.8 MPa, Unannealed	162	°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

Injection	Typical Value	Unit
Drying Temperature	149	°C
Drying Time	4.0	hr
Rear Temperature	354	°C
Middle Temperature	366	°C
Front Temperature	371	°C
Nozzle Temperature	374	°C
Mold Temperature	177 to 204	°C
Injection Rate	Fast	
Screw Compression Ratio	2.5:1.0 to 3.5:1.0	

## Injection Notes

Back Pressure: minimum

## Notes

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

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