

KetaSpire® KT-820P

polyetheretherketone

KetaSpire® KT-820P is a low 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-820P is intended for extrusion compounding. This powder is also available as KT-820NT in a natural-color pellet form for injection molding.

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	• Semiconductor Applications
RoHS Compliance	• RoHS Compliant	
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

Mechanical	Typical Value	Unit	Test method
Tensile Modulus	3600	MPa	ASTM D638
Tensile Strength	96.0	MPa	ASTM D638
Tensile Elongation			ASTM D638
Yield	5.2	%	
Break ¹	> 60	%	
Break ²	20 to 30	%	
Flexural Modulus	3900	MPa	ASTM D790
Flexural Strength	152	MPa	ASTM D790

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Impact	Typical Value	Unit	Test method
Notched Izod Impact	70	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
Fill Analysis	Typical Value	Unit	Test method
Melt Viscosity (400°C, 1000 sec ⁻¹)	420	Pa·s	ASTM D3835

Notes

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

¹ Quenched

² Crystallized



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