

## Solvay Specialty Polymers KetaSpire® KT-850 Polyetheretherketone (PEEK) (Unverified Data\*\*)

Category : Polymer , Thermoplastic , Polyketone , Polyetheretherketone (PEEK)

### Material Notes:

KetaSpire KT-850 is the intermediate-flow grade of unreinforced polyetheretherketone (PEEK) supplied in a natural-color pellet 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. - Natural: KT-850 NTInjection Notes: Back Pressure: minimumInformation provided by Solvay Specialty Polymers.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Solvay-Specialty-Polymers-KetaSpire-KT-850-Polyetheretherketone-PEEK-nbspUnverified-Data.php](http://www.lookpolymers.com/polymer_Solvay-Specialty-Polymers-KetaSpire-KT-850-Polyetheretherketone-PEEK-nbspUnverified-Data.php)

Physical Properties	Metric	English	Comments
Specific Gravity	1.30 g/cc	1.30 g/cc	ASTM D792
Water Absorption	0.10 % @Time 86400 sec	0.10 % @Time 24.0 hour	ASTM D570
Viscosity	380000 cP @Shear Rate 1000 1/s, Temperature 400 °C	380000 cP @Shear Rate 1000 1/s, Temperature 752 °F	Melt; ASTM D3835
Linear Mold Shrinkage, Flow	0.012 cm/cm @Thickness 3.18 mm	0.012 in/in @Thickness 0.125 in	5" x 0.5" x 0.125" bar; ASTM D955
Linear Mold Shrinkage, Transverse	0.014 cm/cm @Thickness 3.18 mm	0.014 in/in @Thickness 0.125 in	5" x 0.5" x 0.125" bar; ASTM D955
Melt Flow	10 g/10 min @Load 2.16 kg, Temperature 400 °C	10 g/10 min @Load 4.76 lb, Temperature 752 °F	ASTM D1238

Mechanical Properties	Metric	English	Comments
Hardness, Shore D	88 @Time 1.00 sec	88 @Time 0.000278 hour	ASTM D2240
Tensile Strength	96.5 MPa	14000 psi	51 mm/min; ASTM D638
Elongation at Break	20 - 30 %	20 - 30 %	51 mm/min; ASTM D638
	>= 50 %	>= 50 %	5.1 mm/min; ASTM D638

<b>Mechanical Properties</b>	<b>Metric</b>	<b>English</b>	<b>Comments</b>
Tensile Modulus	3.65 GPa	529 ksi	51 mm/min; ASTM D638
Flexural Strength	146 MPa	21200 psi	ASTM D790
Flexural Modulus	3.70 GPa	537 ksi	ASTM D790
Izod Impact, Notched	0.910 J/cm	1.70 ft-lb/in	ASTM D256
	NB	NB	ASTM D256

<b>Thermal Properties</b>	<b>Metric</b>	<b>English</b>	<b>Comments</b>
CTE, linear, Parallel to Flow	43.0 $\mu\text{m}/\text{m}\cdot\text{°C}$ @Temperature -50.0 - 50.0 $\text{°C}$	23.9 $\mu\text{in}/\text{in}\cdot\text{°F}$ @Temperature -58.0 - 122 $\text{°F}$	TMA; ASTM E831
Melting Point	340 $\text{°C}$	644 $\text{°F}$	ASTM D3418
Deflection Temperature at 1.8 MPa (264 psi)	162 $\text{°C}$	324 $\text{°F}$	Annealed; ASTM D648
Glass Transition Temp, Tg	150 $\text{°C}$	302 $\text{°F}$	ASTM D3418

<b>Processing Properties</b>	<b>Metric</b>	<b>English</b>	<b>Comments</b>
Rear Barrel Temperature	355 $\text{°C}$	671 $\text{°F}$	
Middle Barrel Temperature	365 $\text{°C}$	689 $\text{°F}$	
Front Barrel Temperature	370 $\text{°C}$	698 $\text{°F}$	
Nozzle Temperature	375 $\text{°C}$	707 $\text{°F}$	
Mold Temperature	175 - 205 $\text{°C}$	347 - 401 $\text{°F}$	
Drying Temperature	150 $\text{°C}$	302 $\text{°F}$	
Dry Time	4.00 hour	4.00 hour	

<b>Descriptive Properties</b>	<b>Value</b>	<b>Comments</b>
Appearance	Natural Color	
Availability	Africa & Middle East	
	Asia Pacific	
	Europe	
	North America	

<b>Descriptive Properties</b>	<b>South America Value</b>	<b>Comments</b>
<b>Features</b>	Ductile	
	Fatigue Resistant	
	Flame Retardant	
	Good Chemical Resistance	
	Good Dimensional Stability	
	Good Impact Resistance	
	High Heat Resistance	
<b>Forms</b>	Pellets	
<b>Generic</b>	PEEK	
<b>Injection Rate</b>	Fast	
<b>Processing Method</b>	Extrusion Blow Molding	
	Film Extrusion	
	Injection Molding	
	Machining	
	Profile Extrusion	
	Thermoforming	
	Wire & Cable Extrusion	
<b>RoHS Compliance</b>	RoHS Compliant	
<b>Screw Compression Ratio</b>	2.5:1.0 to 3.5:1.0	
<b>Uses</b>	Aircraft Applications	
	Automotive Applications	
	Bearings	
	Bushings	
	Compounding	
	Electrical/Electronic Applications	
	Film	
	Industrial Applications	

Descriptive Properties	Value	Comments
	Medical/Healthcare Applications	
	Oil/Gas Applications	
	Seals	
	Tubing	

## Contact Songhan Plastic Technology Co.,Ltd.

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