Solvay Specialty Polymers KetaSpireÂ® KT-820 SL10 Polyetheretherketone (PEEK)

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

Material Notes:

KetaSpireÂ® KT-820 SL10 is a polyetheretherketone (PEEK) based compound designed to offer enhanced lubricity and reduced friction compared to standard PEEK. Unlike other grades formulated for wear resistance, this grade offers high lubricity while retaining outstanding ductility and toughness that surpasses that of unmodified high viscosity PEEK. Also, this product offers high melt flow, which allows injection molding of thin, intricate, or complex parts.In addition to these differentiating features, this resin also offers the outstanding combination of ultra-performance attributes commonly known for PEEK. These include: mechanical strength and stiffness even at elevated temperatures, long term thermal-oxidative stability, fatigue resistance, and excellent chemical resistance to a broad range of harsh chemical environments including acids, bases, and organics.The attractive combination of properties make KetaSpireÂ® KT-820 SL10 suitable for applications in transportation, electronics, chemical processing, and industrial uses including oil and gas exploration and production.Features: Fatigue Resistant; Flame Retardant; Good Chemical Resistance; Good Dimensional Stability; Good Wear Resistance; High Heat ResistanceUses: Film; Industrial Applications; Oil/Gas Applications; Profiles; Rods; Sheet; TubingInformation provided by Solvay Specialty Polymers.

Order this product through the following link:
http://www.lookpolymers.com/polymer_Solvay-Specialty-Polymers-KetaSpire-KT-820-SL10-Polyetheretherketone-PEEK.php

Physical Properties	Metric	English	Comments
Density	1.35 g/cc	0.0488 lb/inÂ³	ASTM D792
Water Absorption	0.10 % @Time 86400 sec	0.10 % @Time 24.0 hour	ISO 62
Viscosity	170000 cP @Shear Rate 1000 1/s, Temperature 400 Â°C	170000 cP @Shear Rate 1000 1/s, Temperature 752 Â°F	Melt Viscosity; ASTM D3835
Linear Mold Shrinkage, Flow	0.012 - 0.014 cm/cm @Thickness 3.18 mm	0.012 - 0.014 in/in @Thickness 0.125 in	
Linear Mold Shrinkage, Transverse	0.016 - 0.018 cm/cm @Thickness 3.18 mm	0.016 - 0.018 in/in @Thickness 0.125 in	ASTM D955

Mechanical Properties	Metric	English	Comments
Hardness, Shore D	83	83	1 sec; ASTM D2240
Tensile Strength	88.0 MPa	12800 psi	50 mm/min; ASTM D638
Elongation at Break	60 %	60 %	Type 1A, 50 mm/min; ISO 527-2
	60 %	60 %	50 mm/min; ASTM D638

Mechanical Properties	Metric	English	Comments
Tensile Modulus	3.60 GPa	522 ksi	50 mm/min; ASTM D638
Flexural Strength	134 MPa	19400 psi	ASTM D790
Flexural Yield Strength	134 MPa	19400 psi	ASTM D790
Flexural Modulus	3.50 GPa	508 ksi	ASTM D790
Izod Impact, Notched	1.70 J/cm	3.18 ft-lb/in	ASTM D256
Izod Impact, Unnotched	NB	NB	ASTM D256

Thermal Properties	Metric	English	Comments
Deflection Temperature at 1.8 MPa (264 psi)	155 Â°C	311 Â°F	Annealed; ASTM D648

Processing Properties	Metric	English	Comments
Rear Barrel Temperature	365 Â°C	689 Â°F	
Middle Barrel Temperature	370 Â°C	698 Â°F	
Front Barrel Temperature	375 Â°C	707 Â°F	
Nozzle Temperature	380 Â°C	716 Â°F	
Mold Temperature	175 - 205 Â°C	347 - 401 Â°F	
Drying Temperature	150 Â°C @Time 14400 sec	302 Â°F @Time 4.00 hour	

Descriptive Properties	Value	Comments
Availability	Africa & Middle East	
	Asia Pacific	
	Europe	
	Latin America	
	North America	
Color	Black	
Form	Pellets	
Injection Rate	Fast	
Processing Technique	Injection Molding; Machining; Profile Extrusion	

Descriptive Properties	Value	Comments
RoHS Compliance	RoHS Compliant	
Screw Compression Ratio	2.5:1.0 to 3.5:1.0	

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com
Email : sales@lookpolymers.com
Tel : +86 021-51131842
Mobile : +86 13061808058
Skype : lookpolymers
Address : United North Road 215,Fengxian District, Shanghai City,China