

Product Features

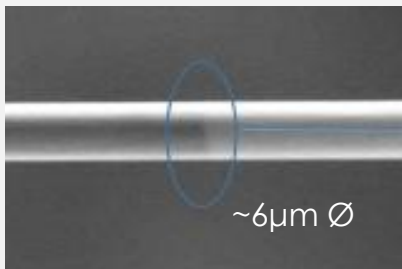
- Tunable PEKK Thin Film 75nm-250nm
- Water Soluble
- Electrically Insulative
- Chemically Inert
- Abrasion Resistant

Applications

- Fiber Sizing
- Wire Jackets
- High Temperature Adhesive
- Chemical and Corrosion Resistant Films and Coatings

Targeted Properties*

Property	Test Method	Nominal Value
Specific Gravity, g/cm ³	ASTM D792	1.28
MECHANICAL		
Tensile Strength (Break), Kpsi	ASTM D638	13 (Metric)
Tensile Modulus, Mpsi	ASTM D638	0.5
Elongation (Break), %	ASTM D638	80
Flexural Strength @ 5% strain, Kpsi	ASTM D790	20
Flexural Modulus, Mpsi	ASTM D790	0.49
Compressive Strength, Kpsi	ASTM D695	15
Coefficient of Friction, Static	ASTM D1894	0.285
Hardness, Rockwell M	ASTM D785	86
THERMAL		
Tm-Melting Point, °F (°C)	DSC	577 (303)
Tg-Glass Transition, °F (°C)	DSC	310 (155)
Flammability Rating	UL94	V-0
Thermal Conductivity, BTU-in/Hr ft ² F	ASTM C177	1.75
CTE (<Tg), 10-6/°F	ASTM D696	42.8
ELECTRICAL @ .125 Inch		
Dielectric Strength	ASTM D149	600
Dielectric Constant @ 1KHz	ASTM D150	3.3
Volume Resistivity, ohm-cm	ASTM D257	1.00E+16
Surface Resistivity, ohm	ASTM D257	2.00E+16
Dissipation Factor @ 1 KHz	ASTM D150	4.00E-03
ELECTRICAL @ 5 Mil		
Dielectric Strength	ASTM D149	1900
Dielectric Constant @ 1KHz	ASTM D150	2.1
Volume Resistivity, ohm-cm	ASTM D257	1.0E+16
Surface Resistivity, ohm	ASTM D257	2.0E+16
Dissipation Factor @ 1 KHz	ASTM D150	0.001



- Ultra Thin
- Fully contiguous
- Tenaciously bonded

Suggested Application Methodology

1. Dilute OXPEKK®-SC into aqueous solution from 1%-5% by weight percentage
2. Apply to substrate via preferred method (dip coat, brush, roll, spray)
3. Remove excess solution using preferred doctoring method (scraper, roller, blow-off)
4. Dry the applied solution using desiccated air impinge or radiant heat at 100°C-150°C
5. To defunctionalize, use similar curing method at 240°C-280°C for partial to total effect
6. To fully fuse contiguous OXPEKK®-SC layer, apply heat (radiant or convective) at 315°C-330°C
7. Steps 5 and 6 may be modified to achieve desired effect

*Provisional Data Sheet

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