

KETRON® PEEK CA30

PolyEtherEtherKetone - PEEK 30% Carbon Fibers Filled



** KETRON® is the registered trademark of

QUADRANT

PRODUCT CAPABILITIES:

- · Rod : 6mm 200mm
- · Sheet: 5mm 50mm

ADVANTAGES:

- Carbon Fibers Filled To Enhance the Compressive Strength And Stiffness of PEEK, And Lower Its Expansion Rate
- 3.5 Times Higher Thermal Conductivity Than Unreinforced PEEK
- Very High Max. Allowable Service
 Temperature In Air (250°C Continuous, Up To 310°C For Short Periods)
- · High Mechanical Strength, Stiffness And Creep Resistance
- Excellent Chemical And Hydr<mark>olysis</mark> Resistance

PRODUCT COLORS:



APPLICATIONS INCLUDE:

- $\cdot \ \text{Gas Analyses Structural Body Parts}$
- · Scraper Blades In Head Exchangers
- · Sleeve Bearings For Steel Wire Guide
- Pump Wear Rings

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GENERAL PROPERTIES	ASTM or UL Test	KETRON® PEEK CA30 Typical Values
PHYSICAL		
Specific Gravity (g/cm³)	D792	1.41
Water Absorption, 24 hrs (%)	D570	0.06
MECHANICAL		
Tensile Strength (psi)	D638	19,000
Tensile Modulus (psi)	D638	1,100,000
Tensile Elongation at Break (%)	D638	5
Flexural Strength (psi)	D790	25,750
Flexural Mo <mark>dulus</mark> (psi)	D790	1,250,000
Compressive Strength (psi)	D695	29,000
Compressive Modulus (psi)	D695	- 05 Ted
Hardness, Rockwell	D785	M102
IZOD Notched Impact (ft-lb/in)	D256	1.03
THERMAL		
Coeff. of Thermal Expansion(x 10 ⁻⁵ in./in./°F)	E831	1
Heat Deflection Temp (°F / °C) @ 264 psi	D648	518 / 270
Melting Temp (°F / °C)	D3418	644 / 340
Max Operating Temp (°F / °C)	- 60 4094	482 /250
Thermal Conductivity (BTU-in/ft²-hr-°F)	F433	6.4
Flammability Rating	UL94	V-O Road and See
ELECTRICAL		
Dielectric Strength (V/mil) short time	D149	32
Dielectric Constant at 1 MHz	D150	-
Dissipation Factor at 1 MHz	D150	-
Surface Resistivity (ohm/sq) at 50% RH	EOS/ESD \$11.11	10 ⁵

NOTE: The information contained here in is typical values intended for reference only. They should NOT be used as a basis for design specifications or quality control.