



\*\* ffETRON® is the registered trademark of

## MITSUBISHI CHEMICAL ADVANCED MATERIALS

### 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 Hydrolysis Resistance

### PRODUCT COLORS:

- Black

### APPLICATIONS INCLUDE:

- Gas Analyses Structural Body Parts
- Scraper Blades In Head Exchangers
- Sleeve Bearings For Steel Wire Guide Rollers
- Pump Wear Rings

GENERAL PROPERTIES	ASTM or UL Test	KETRON® PEEK CA30 Typical Values
<b>PHYSICAL</b>		
Specific Gravity (g/cm <sup>3</sup> )	D792	1.41
Water Absorption, 24 hrs (%)	D570	0.06
<b>MECHANICAL</b>		
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 Modulus (psi)	D790	1,250,000
Compressive Strength (psi)	D695	29,000
Hardness, Rockwell	D785	M102
IZOD Notched Impact (ft-lb/in)	D256	1.03
<b>THERMAL</b>		
Coeff. of Thermal Expansion(x 10 <sup>-5</sup> in./in./°F)	E831	1
Heat Deflection Temp (°F / °C) @ 264 psi	D648	518 / 270
Melting Temp (°F / °C)	D3418	644 / 340
Continuous allowable service temperature in air (°F / °C)	-	482 / 250
Thermal Conductivity (BTU-in/ft <sup>2</sup> -hr-°F)	F433	6.4
Flammability Rating	UL94	V-0
<b>ELECTRICAL</b>		
Dielectric Strength (V/mil) short time	D149	32
Dielectric Constant at 1 MHz	D150	-
Dissipation Factor at 1 MHz	D150	-
Surface Resistivity (ohm/sq)	ANSI / ESD STM 11.11	10 <sup>5</sup> -10 <sup>7</sup>
Volume Resistivity (ohm.cm)	D257	-

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.