

**KetaSpire® KT-890 P**

PEEK

Syensqo

Processing/Physical Characteristics	Value	Unit	Test Standard
<b>ASTM Data</b>			
Melt Flow Index, MFI	85	g/10min	ASTM D 1238
Temperature	385	°C	-
Load	2.16	kg	-

Mechanical properties	Value	Unit	Test Standard
<b>ASTM Data</b>			
Tensile Modulus	3900	MPa	ASTM D 638
Tensile Strength	105	MPa	ASTM D 638
Elongation at Yield	5.9	%	ASTM D 638
Elongation at Break	15	%	ASTM D 638
Flexural Modulus	4100	MPa	ASTM D 790
Flexural Strength	163	MPa	ASTM D 790
Izod Impact notched, 1/8 in	48	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
<b>ASTM Data</b>			
DTUL @ 264 psi	160 <sup>[ann.]</sup>	°C	ASTM D 648
Melting Temperature	345	°C	ASTM D 3418
Glass Transition Temperature	147	°C	ASTM E 1356
Thermal Conductivity, solid state	0.036	W/(m K)	ASTM C 177

ann.: annealed

Other properties	Value	Unit	Test Standard
Water Absorption, 24hr	0.1	%	ASTM D 570
Density	1300	kg/m <sup>3</sup>	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	150	°C	-
Pre-drying - Time	4	h	-
Mold temperature	175 - 205	°C	-
Zone 1	355	°C	-
Zone 2	365	°C	-
Zone 3	370	°C	-
Nozzle temperature	375	°C	-

**Characteristics****Processing**

Injection Molding, Fiber Extrusion, Wire/Cable Extrusion

**Delivery form**

Powder, Natural Color

**Additives**

Lubricants

**Special Characteristics**

Flame retardant, High impact or impact modified, Heat stabilized or stable to heat, Sterilizable, Ethylene Oxide (EtO) Sterilization, Steam sterilization, Gamma irradiation sterilization, Electron beam (e-beam) sterilization

**Features**

Ductile, Fatigue Resistance

**Chemical Resistance**

Acid Resistance, Alkali Resistance, General Chemical Resistance, Oil Resistance

**Certifications**

Medical Grade, Device Master File

**Applications**

Aircraft and Aerospace, Chemical Process, Electrical and Electronical, Medical

**Regional Availability**

North America, Europe, Asia Pacific, South and Central America, Near East/Africa