

KetaSpire® KT-890

PEEK

Syensqo

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

Mechanical properties	Value	Unit	Test Standard
ASTM Data			
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
ASTM Data			
DTUL @ 264 psi	160 ^[ann.]	°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 ³	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

Pellets, 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