

KetaSpire® KT-851 NL

PEEK

Syensqo

Processing/Physical Characteristics	Value	Unit	Test Standard
ASTM Data			
Melt Flow Index, MFI	10	g/10min	ASTM D 1238
Temperature	400	°C	-
Load	2.16	kg	-
Mold Shrinkage, MD	0.012	mm/mm	ASTM D 955
Mold Shrinkage, TD	0.014	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	3850	MPa	ISO 527
Yield stress	95	MPa	ISO 527
Yield strain	4.8	%	ISO 527
Strain at break	25	%	ISO 527
Flexural modulus, 23°C	3620	MPa	ISO 178
Izod impact strength, +23°C	N	kJ/m ²	ISO 180/1U
Izod notched impact strength, +23°C	7.5	kJ/m ²	ISO 180/1A

ASTM Data			
Tensile Modulus	3600	MPa	ASTM D 638
Tensile Strength	96	MPa	ASTM D 638
Elongation at Yield	5.2	%	ASTM D 638
Elongation at Break	25	%	ASTM D 638
Compressive Strength	121	MPa	ASTM D 695
Flexural Modulus	3900	MPa	ASTM D 790
Flexural Strength	152	MPa	ASTM D 790
Rockwell Hardness	M 97	-	ASTM D 785
Shore D Hardness	88	-	ASTM D 2240
Izod Impact notched, 1/8 in	69	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ASTM Data			
Melting Temperature	340	°C	ASTM D 3418
Glass Transition Temperature	150	°C	ASTM E 1356

Electrical properties	Value	Unit	Test Standard
ASTM Data			
Surface Resistivity	>1E15	Ohm	ASTM D 257
Volume Resistivity	>1E15	Ohm*cm	ASTM D 257

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, Profile Extrusion, Coating

Features

Ductile, Fatigue Resistance

Delivery form

Pellets, Natural Color

Additives

Lubricants

Special Characteristics

Flame retardant, High impact or impact modified, Heat stabilized or stable to heat

Chemical Resistance

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

Applications

Electrical and Electronical

Regional Availability

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