

Processing/Physical Characteristics	Value	Unit	Test Standard
ASTM Data			
Melt Flow Index, MFI	3	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			
ISO Data			
Tensile Modulus	3830	MPa	ISO 527
Yield stress	96	MPa	ISO 527
Yield strain	4.9	%	ISO 527
Flexural modulus, 23°C	3700	MPa	ISO 178
Izod impact strength, +23°C	N	kJ/m ²	ISO 180/1U
Izod notched impact strength, +23°C	9.2	kJ/m ²	ISO 180/1A
ASTM Data			
Tensile Modulus	3500	MPa	ASTM D 638
Tensile Strength	95	MPa	ASTM D 638
Elongation at Yield	5.2	%	ASTM D 638
Elongation at Break	78	%	ASTM D 638
Compressive Strength	118	MPa	ASTM D 695
Flexural Modulus	3700	MPa	ASTM D 790
Flexural Strength	146	MPa	ASTM D 790
Rockwell Hardness	M 97	-	ASTM D 785
Shore D Hardness	88	-	ASTM D 2240
Izod Impact notched, 1/8 in	91	J/m	ASTM D 256
Izod Impact unnotched, 1/8 in	N	J/m	ASTM D 256
Thermal properties			
ISO Data			
Burning behav. at 1.5 mm nom. thickn.	V-0	class	IEC 60695-11-10
Thickness tested	1.6	mm	-
Burning behav. at thickness h	V-1	class	IEC 60695-11-10
Thickness tested	0.8	mm	-
ASTM Data			
Coefficient of Thermal Expansion, MD	43	E-6/K	ASTM D 696
Melting Temperature	340	°C	ASTM D 3418
Glass Transition Temperature	150	°C	ASTM E 1356
Limiting Oxygen Index	37	%	ASTM D 2863
Electrical properties			
ASTM Data			
Dielectric Strength, Short Time	17	kV/mm	ASTM D 149
Dissipation Factor, 60 Hz	0.001	-	ASTM D 150
Dissipation Factor, 1 MHz	0.003	-	ASTM D 150
Dielectric Constant, 60 Hz	3.06	-	ASTM D 150
Dielectric Constant, 1 MHz	3.05	-	ASTM D 150
Surface Resistivity	>1E15	Ohm	ASTM D 257
Volume Resistivity	>1E15	Ohm*cm	ASTM D 257
Other properties			
Water Absorption, 24hr	0.1	%	ASTM D 570
Density	1300	kg/m ³	ASTM D 792
Processing Recommendation Injection Molding			
Pre-drying - Temperature	150	°C	-
Pre-drying - Time	4	h	-

KetaSpire® KT-820 BK 95

PEEK

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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, Film Extrusion, Profile Extrusion, Wire/Cable Extrusion, Blow Molding, Thermoforming

Delivery form

Pellets, Black

Additives

Lubricants

Special Characteristics

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

Features

Fatigue Resistance

Chemical Resistance

General Chemical Resistance, Oil Resistance, Radiation Resistance

Certifications

Medical Grade, Biocompatibility ISO 10993

Applications

Chemical Process, Electrical and Electronical, Medical

Regional Availability

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