

| 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

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

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