

# KetaSpire® CF10 HC AM Filament

## polyetheretherketone

KetaSpire® CF10 HC AM Filament incorporates 10% carbon fiber reinforcement into a PEEK matrix for increased strength offered for use in high-performance healthcare applications. This material provides long-term performance

up to 240 °C, including exceptional chemical resistance. These properties make it particularly suited for metal replacement.

### General

Material Status	• Commercial: Active
Availability	<ul style="list-style-type: none"> <li>• Africa &amp; Middle East</li> <li>• Asia Pacific</li> <li>• Europe</li> <li>• Latin America</li> <li>• North America</li> </ul>
Filler / Reinforcement	• Carbon Fiber, 10% Filler by Weight
Features	<ul style="list-style-type: none"> <li>• Biocompatible</li> <li>• Chemical Resistant</li> <li>• Ductile</li> <li>• Flame Retardant</li> <li>• Good Dimensional Stability</li> <li>• Good Impact Resistance</li> <li>• High Heat Resistance</li> <li>• High Strength</li> </ul>
Uses	<ul style="list-style-type: none"> <li>• Medical Devices</li> <li>• Medical/Healthcare Applications</li> </ul>
Agency Ratings	• ISO 10993
RoHS Compliance	• Contact Manufacturer
Appearance	• Black
Forms	• Filament
Processing Method	• 3D Printing, Fused Filament Fabrication (FFF)

Physical	Typical Value	Unit	Test method
Density / Specific Gravity	1.33		ASTM D792

Mechanical	Typical Value	Unit	Test method
Tensile Modulus	11000	MPa	ASTM D638
Tensile Strength (Break)	140	MPa	ASTM D638
Tensile Elongation (Break)	1.7	%	ASTM D638

Impact	Typical Value	Unit	Test method
Notched Izod Impact	89	J/m	ASTM D256

Thermal	Typical Value	Unit	Test method
Melting Temperature	343	°C	ASTM D3418

Additional Information	Typical Value	Unit
Diameter - Filament	1.75	mm

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Printing conditions for above data table:

- Filament drying conditions, minimum temperature 4h: 150°C
- Extruder temperature: 390-450°C
- Bed temperature: >200°C
- Printing tool path: 0°

Test specimen parameters:

- First layer: 0.3mm thick
  - Subsequent layers: 0.1mm
  - 100% infill
  - 3 shells
  - Printing speed: 18 mm/s
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## Notes

Typical properties: these are not to be construed as specifications.



Safety Data Sheets (SDS) are available by emailing us or contacting your sales representative. Always consult the appropriate SDS before using any of our products.

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