

KetaSpire® CF10 LS1 AM Filament

polyetheretherketone

Ketaspire® CF10 LS1 AM Filament incorporates 10% carbon fiber reinforcement into a PEEK matrix for increased strength. This material provides long-term performance up to 240 °C, including exceptional chemical resistance. These

properties make it particularly suited for metal replacement in critical applications in severe end-use environments, such as Oil & Gas, Aerospace and Automotive.

General

Material Status	• Commercial: Active
Availability	<ul style="list-style-type: none"> • Africa & Middle East • Asia Pacific • Europe • Latin America • North America
Filler / Reinforcement	• Carbon Fiber, 10% Filler by Weight
Features	<ul style="list-style-type: none"> • Chemical Resistant • Ductile • Flame Retardant • Good Dimensional Stability • Good Impact Resistance • High Heat Resistance • High Strength
Uses	<ul style="list-style-type: none"> • Aerospace Applications • Automotive Applications • Oil/Gas Applications
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.

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