

## 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><li> Africa &amp; Middle East</li><li> Asia Pacific</li><li> Europe</li></ul>		atin America orth America	
Filler / Reinforcement	Carbon Fiber, 10% Filler by Weight			
Features	<ul> <li>Chemical Resistant</li> <li>Ductile</li> <li>Flame Retardant</li> <li>Good Dimensional Stability</li> </ul>	• H	ood Impact Resistance igh Heat Resistance igh Strength	
Uses	<ul><li>Aerospace Applications</li><li>Automotive Applications</li></ul>	Oil/Gas Applications		
RoHS Compliance	Contact Manufacturer			
Appearance	• Black			
Forms	<ul> <li>Filament</li> </ul>			
Processing Method	<ul> <li>3D Printing, Fused Filament Fabrication (FFF)</li> </ul>			
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	

Printing conditions for above data table:

- Filament drying conditions, minimum 4h: 150°C
- Extruder temperature: 400-440°C
- Bed temperature: 180-220°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

## Notes

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

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