

KetaSpire® NT1 HC AM Filament

polyetheretherketone

Ketaspire® NT1 HC AM Filament provides long-term performance up to 240 °C, including exceptional chemical resistance, outstanding wear and abrasion resistance

offered for use in high-performance healthcare applications. These properties make it particularly suited for metal replacement.

General

Material Status	• Commercial: Active	
Availability	• Africa & Middle East • Asia Pacific • Europe	• Latin America • North America
Features	• Biocompatible • Chemical Resistant • Ductile • Flame Retardant	• Good Dimensional Stability • Good Impact Resistance • High Heat Resistance
Uses	• Medical Devices	• Medical/Healthcare Applications
Agency Ratings	• ISO 10993	
RoHS Compliance	• Contact Manufacturer	
Appearance	• Natural Color	
Forms	• Filament	
Processing Method	• 3D Printing, Fused Filament Fabrication (FFF)	

Physical

	Typical Value	Unit	Test method
Density / Specific Gravity	1.29		ASTM D792

Mechanical

	Typical Value	Unit	Test method
Tensile Modulus	3120	MPa	ASTM D638
Tensile Strength			ASTM D638
Yield	85.0	MPa	
Break	48.0	MPa	
Tensile Elongation			ASTM D638
Yield	4.8	%	
Break	26	%	

Impact

	Typical Value	Unit	Test method
Notched Izod Impact	81	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: cross hatching in the XY plane

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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