

KetaSpire® MS NT1 AM Filament

polyetheretherketone

Ketaspire® MS NT1 AM Filament provides long-term performance up to 240 °C, including exceptional chemical resistance, outstanding wear and abrasion 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	• Africa & Middle East • Asia Pacific • Europe	• Latin America • North America
Features	• Chemical Resistant • Ductile • Flame Retardant	• Good Dimensional Stability • Good Impact Resistance • High Heat Resistance
Uses	• Aerospace Applications • Automotive Applications	• Oil/Gas Applications
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.

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