

Solef® PVDF AM Filament MSC NT 1

polyvinylidene fluoride

Solef® PVDF AM Filament MSC NT 1 provides long term performance up to 120°C, including exceptional chemical resistance and outstanding UV, weathering and oxidation resistance. The product is also intrinsically endowed of a

very high purity. These features make it particularly suited for outdoor applications, and applications in contact with harsh chemical environments, such as Chemical Processing Industry, Semiconductor Industry and Oil&Gas.

General

Material Status	• Commercial: Active
Availability	<ul style="list-style-type: none"> • Africa & Middle East • Asia Pacific • Europe • Latin America • North America
Features	<ul style="list-style-type: none"> • Chemical Resistant • Flame Retardant • Good Weather Resistance • High Purity • Oxidation Resistant • UV Resistant
Uses	<ul style="list-style-type: none"> • Additive Manufacturing (3D Printing) • Industrial Applications • Oil/Gas Applications • Plumbing Parts
RoHS Compliance	• Contact Manufacturer
Appearance	• White
Forms	• Filament
Processing Method	• 3D Printing, Fused Filament Fabrication (FFF)

Physical	Typical Value	Unit	Test method
Density - Specific Gravity ¹	1.72	g/cm ³	ASTM D792

Mechanical	Typical Value	Unit	Test method
Tensile Modulus ²	800	MPa	ASTM D638
Tensile Strength ²			ASTM D638
Yield	30.0	MPa	
Break	25.0	MPa	
Tensile Elongation ²			ASTM D638
Yield	10	%	
Break	50 to 250	%	

Impact	Typical Value	Unit
Charpy Notched Impact Strength	6.00	kJ/m ²

Thermal	Typical Value	Unit	Test method
Melting Temperature	148	°C	ASTM D3418

Additional Information	Typical Value	Unit
Diameter - Filament	2.85	mm

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Printing conditions for above data table:

- Filament drying conditions: drying not needed
- Extruder temperature: 225 - 235°C
- Bed temperature: 100°C
- Printing tool path: cross hatching in the XY plane

Test specimen parameters:

- Layer thickness: 0.2 mm
 - 100% infill
 - 3 shells
 - Printing speed: 25 mm/s
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Notes

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

¹ On 3D printed specimens

² On 3D printed specimens, x-direction

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