

# Material Data Sheet

## nPOWER

polyphenylene sulfide

### Mechanical Properties\*

Type	Test Method	Imperial	Metric
Tensile Modulus	ASTM D638	285144.2 psi	1966 Mpa
Yield Point	ASTM D638	39.7%	39.7%
Tensile Elongation at Yield	ASTM D638	2.8%	2.8%
Tensile Strength Ultimate	ASTM D638	5018.306 psi	34.6 Mpa
Tensile Elongation at Break	ASTM D638	7.4%	7.4%

### Thermal Properties

	Test Method	Imperial	Metric
Maximum working temperature		424.4°F	205°C
Heat Deflection at 1.82 MPa	ISO 75	221°F	105°C
Degradation Temperature		734°F	390°C

### Chemical & Fire Resistance Properties

Chemical Resistance	nPOWER is unaffected by most widely used industrial acids and fuels, see nPOWER chemical resistances table for detailed information.		
Fire Retardant Properties	Self extinguishing: UL94 VO		

### Electrical Properties

	Test Method	Imperial	Metric
Volume Resistivity	ISO 3915	N/A	10 <sup>14</sup> ohm-cm

### Physical Characteristics

Type	Imperial	Metric
Density	.0361 lbs/in	1.26 gr/cm <sup>3</sup>
Shrink	TBA	

\*3D printed part mechanical testing is underway, the mechanical test results shown on this preliminary TDS are for injection molded samples, this data will be updated ASAP.