

PPS stands for Polyphenylene Sulfide. It is a high-performance thermoplastic polymer known for its excellent thermal and chemical resistance. PPS exhibits high strength, rigidity, and dimensional stability even at elevated temperatures. It has low moisture absorption, good electrical properties, and is resistant to various chemicals, fuels, and solvents.

**Chemical Description**

Description	Value
Material Type	Thermoplastic
Chemical Name	PPS Polyphenylene Sulfide
Additives	Unfilled
Color	Typically black or dark gray
UV Resistant	Yes

**Physical Properties**

Property	Maximum Unless Range is Specified
Density,lbs/in <sup>3</sup>	0.049
Water Absorption, 24 hrs, Immersion,% by wt.	0.01
Coefficient of Linear Thermal Expansion, x10 <sup>-5</sup> in./in./°F	2.8
Heat Deflection Temp,°F at 263psi	250
Melting Point Temp,°F	540
Max Continuous Operating Temp,°F	425
Flammability Rating,UL94	V-0
Dielectric Strength,V/mil	540
Dielectric Constant at 1 MHz	3.0
Thermal Conductivity,BTU-in/ft <sup>2</sup> -hr-°F	2.0

**Mechanical Properties**

Property	Maximum Unless Range is Specified
Tensile Strength,ksi	13.5
Tensile Modulus,ksi	500
Compressive Strength,ksi	21.5
Compressive Modulus,ksi	430
Flexural Strength,ksi	21
Flexural Modulus,ksi	575
Elongation at Break	15%
Hardness Rockwell	M95/R125
Notched Izod Impact Strength,ft-lb/in	0.6

The material properties in this datasheet are provided by one of the manufacturers collaborating with Naxtry. Please note that material properties may slightly vary among different manufacturers. Naxtry can accommodate customer requests for specific materials or brands.