

PPS (Polyphenylene Sulfide) — Technical Datasheet

PPS (Polyphenylene Sulfide) is a semi-crystalline engineering thermoplastic offering excellent chemical resistance and thermal stability. It maintains mechanical properties at elevated temperatures and exhibits very low moisture absorption, making it suitable for chemical processing and automotive applications.

Key Properties

Density	1.34 – 1.36 g/cm³
Tensile Strength	70 – 85 MPa
Flexural Modulus	3.4 – 3.8 GPa
Elongation at Break	15 – 30%
Max Continuous Service Temperature	220°C
Melting Point	~280°C
Water Absorption	< 0.05% (very low)
Chemical Resistance	Excellent — resistant to acids, alkalis, and organic solvents
Available Forms	Rod, Sheet, Tube
Standard Colors	Natural (tan), Black

Typical Applications: Chemical processing pump components, automotive under-hood parts, electrical connectors, valve components, industrial machinery

Key Features: Outstanding chemical resistance, very low moisture absorption, excellent dimensional stability, good electrical insulation, inherently flame retardant