

# PPS (polyphenylene sulfide)

SUSTATRON® PPS / TECATRON™



PPS is a chemical and corrosion resistant plastic material that is often used in applications involving exposure to corrosive chemicals at elevated temperatures. PPS has outstanding mechanical properties and is also available in a bearing-grade that has excellent wear resistance. PPS is often used as a lower cost alternative to PEEK at low to moderate temperatures.



## KEY CHARACTERISTICS:

- Outstanding chemical resistance
- Resistant to hot water and steam
- Strong and stiff
- Can be used at elevated temperatures
- Bearing grade has excellent wear characteristics
- Good dimensional stability
- Low moisture absorption
- Low thermal expansion
- High dielectric strength

## APPLICATIONS:

- Semiconductor machinery components
- Scientific instrumentation parts
- Seals
- Pump and valve components
- Bearings and bushings (bearing grade)
- Electrical components

## PPS TYPICAL PROPERTIES:

	UNITS	ASTM TEST	PPS
Tensile strength	psi	D-638	12,500
Flexural modulus	psi	D-790	600,000
Izod impact (notched)	ft-lbs/in of notch	D-256	0.5
Heat deflection temperature @264 psi	°F	D-648	220
Maximum continuous service temperature in air	°F		338
Water absorption (immersion 24 hours)	%	D-570	0.02
Coefficient of linear thermal expansion	in/in/°F x 10 <sup>-5</sup>	D-696	4.0

**Standard Sizes: SHEET: 24"x48" (0.25"-2.0" thick) ROD: diameter 0.5"-2.0" TUBE: call for availability**

Length, width, thickness, and diameter tolerances vary by size and by manufacturer • Custom sizes and colors available upon request • Many of our materials are available as films with thicknesses of 0.029" or less. Values may vary according to brand name. Please ask your Curbell Plastics representative for more specific information about an individual brand.

**Curbell Plastics has been supplying plastic sheet, rod, tube, films, adhesives, sealants, and prototyping materials for over 65 years**



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