PPSU | UL94 V-0

PPSU offers high toughness and heat resistance for medical and food parts.

Mechanical properties

Ultimate tensile strength	70 MPa
Young's modulus (modulus of elasticity)	2.3 GPa
Elongation at break	60 - 120 %

Physical properties

UV resistance	Good

Thermal properties

Maximum service temperature	180 °C
Thermal expansion coefficent	30.6 10^-6/ºC

Common applications

Instrument handles	
Medical device components	

PPSU CNC Machining Applications & Parts

PPSU combines exceptional hydrolytic stability, high heat resistance, and inherent flame retardancy (UL94 V-0), making it perfect for medical, aerospace, and food contact applications that require repeated sterilization.

Typical Parts We Machine from PPSU:

- **Medical & Surgical:** Instrument Housings, Sterilization Trays, Endoscope Components
- **Aerospace Interiors:** Cabin Parts, Ducting, Compliant Membrane Switches
- **Food & Dairy:** Processing Machine Parts, Filter Housings, Wear Rings

Our Machining Advantage:

We machine PPSU to medical-grade standards, producing biocompatible components with superb clarity and surface quality that can withstand repeated autoclaving without degradation.

Get an Instant Quote for your custom PPSU parts today.