PU

It has excellent wear resistance, high tensile strength, tear resistance and load bearing capacity, and has good biocompatibility.

Mechanical properties

Ultimate tensile strength	20 - 50 MPa
Yield strength	10 - 40 MPa
Young's modulus (modulus of elasticity)	0.01 - 0.1 GPa
Elongation at break	300 - 700 %
Hardness	60 - 95 HV

Physical properties

UV resistance	Fair

Thermal properties

Maximum service temperature	80 - 120 °C
Thermal expansion coefficent	100 - 200 × 10^-6/°C
Thermal conductivity	0.2 - 0.3 W/(m·°C)

Electrical properties

ESD Safety	No

Common applications

Industrial equipment	
Seals and gaskets	

Polyurethane CNC Machining Applications & Parts

From soft, elastic grades to tough, rigid formulations, we precision machine polyurethane into high-performance parts that leverage its outstanding abrasion resistance, shock absorption, and resilience.

Typical Parts We Machine from PU:

- **Seals & Gaskets:** Custom O-Rings, Hydraulic Seals, Wear Strips
- **Industrial Impact Protection:** Shock Absorbers, Bumpers, Damping Pads, Rollers
- **Jigs & Fixtures:** Soft Jaws, Forming Blocks, Custom Grippers

Our Machining Advantage:

Our machining techniques are tailored to the specific durometer (hardness) of the PU material, preventing tearing or deformation to deliver clean, accurate seals and components.

Get an Instant Quote your custom PU parts today.