

## Auburn Manufacturing Company

29 Stack Street, Middletown, CT 06457

Customer Service: (800) 427-5387

Tel: (860) 346-6677 Fax: (860) 346-1334

Website: [www.auburn-mfg.com](http://www.auburn-mfg.com)

Email: [info@auburn-mfg.com](mailto:info@auburn-mfg.com)

## PTFE

### LOW FRICTION PLASTIC

**PTFE** (polytetrafluoroethylene) is a soft, low friction, fluoropolymer with outstanding chemical and weathering resistance. PTFE is stable at temperatures up to 500 F and is often used in high temperature environments. PTFE also has excellent electrical insulating properties.

### PTFE Material Options

**Virgin (Unfilled) Grade PTFE** – Unfilled PTFE, made from virgin PTFE resin, is extremely soft and formable and is often used for chemical resistance seals and gaskets.

**Glass-Filled PTFE** – Glass-filled PTFE has enhanced strength and stiffness.

**Bearing Grades of PTFE** – Bearing grades of PTFE have extremely low friction and high service temperatures. They are frequently specified for high performance bearings and bushings, particularly in applications that require resistance to corrosive chemicals.

### PTFE is widely used in:

- Seals and Gaskets
- Valve and fitting components
- Pump parts
- Manifolds
- Semiconductor Equipment
- Scientific Instrumentation
- Chemical resistant gaskets
- Bearing and bushings

### Performance Characteristics:

- Outstanding chemical resistance
- Extremely low friction
- Soft and conformable
- Good weathering resistance
- Performs well at elevated temperatures

### Common Brands:

- Teflon®
- Rulon®
- Fluorosint®

### Available in:

- Flat gaskets and seals
- Molded parts
- O-Rings
- Sheets, rolls and strip

### TYPICAL PROPERTIES OF PTFE

	UNITS	ASTM TEST	PTFE
Tensile Strength	psi	D638	1,500 -3,000
Flexural Modulus	psi	D790	72,000
Izod Impact (Notched)	ft-lbs/in of notch	D256	3.5
Heat Deflection Temperature @ 66 psi	°F	D648	250
Maximum Continuous Service Temperature Air	°F		500
Water Absorption (immersion 24 hours)	%	D570	<0.01
Coefficient of Linear Thermal Expansion	in/in/Fx10 <sup>-5</sup>	D696	8.9
Coefficient of Friction (dynamic)			0.10

Values may vary according to brand name. Please ask your Auburn representative for more specific information about an individual brand.