



PB1000 SERIES

Polytetrafluoroethylene (PTFE)

Many end products are fabricated from moldings made from **PB1000** materials, including skived film and sheet, gaskets, packings, mechanical seals, bridge or pipeline bearing pads, shaft bearings, electrical insulators, piston rings, expansion bellows, diaphragms, and chemical linings. The use of fillers along with PB1000 materials provides a wide choice of modified mechanical properties to meet your application requirements. **PB1000 SERIES** materials are FDA approved for use in Food, Beverage, Cosmetics, and Pharmaceutical industries.



KEY MATERIAL ADVANTAGES:

- Excellent corrosion resistance
- Chemically Inert
- Excellent insulative properties
- Wide operating temperature range from minus 350°F to 550° F
- Superior wear properties for bearing applications
- Resists weather-related degradation while remaining inert
- Hundreds to thousands of specialty resin compounds to adapt the material with the application

APPLICATIONS:

- Petrochemical and chemical processing
- Electrical insulators
- Semiconductor chip manufacturing
- Laboratory applications
- Seismic wear pads, bearing plates
- Piston wear bands
- Aerospace parts - shaft seals, etc.

PTFE TYPICAL PROPERTY RESULTS:

	UNITS	ASTM TEST	DUPONT® 7A VIRGIN PTFE PB1000	DAIKIN® M-15 VIRGIN PTFE PB1001
Tensile Strength	PSI	D-4894	34.5(5,004)	43(6,237)
Flexural Modulus	PSI	D-2178	72,000	85,300
Izod Impact (notched)	FT-LBS./IN.	D-256	3.5	3.3
Heat Deflection Temp @ 264 psi	1.8 Mpa	D-648	132°F	126°F
Max. continuous service temp in air	F°	—	500° F	500° F
Water Absorption (immersion for 24 hours)	%	D-570	<0.01%	0.00%
Coefficient of Linear Thermal Expansion	in/in/°Fx10	D-696	7.5 X 10 ⁻⁵	5 X 10 ⁶
Coefficient of Friction (dynamic)	—	—	0.25	0.30
Specific gravity	—	ASTM D 4894	2.159	2.16