

TEFLON PTFE

We specialize in the manufacturing of PTFE (Polytetrafluoroethylene) products, ensuring high standards of quality and performance.



DTEC
ENGINEMECH LLP

www.dtecindia.com

About Company

At DTEC, we have an in-house facility for producing PTFE and PTFE-filled grades like GFT, CFT, MoS2, and graphite, customized to client needs. We offer various forms, including bushes, rings, bellows, PTFE-coated O-rings, wedge seals, and V-packing. Our focus is on tailored PTFE products for processing industries, particularly in sealing materials for mechanical seals, valves, and industrial pumps, aiming to strengthen relationships with manufacturers and clients through high-value products.

What is Teflon?

Teflon® is a registered trademark owned by DuPont, associated with products produced using DuPont's fluoropolymer resins.

What is Teflon?

PTFE, or PolyTetraFluoroEthylene, refers to the polymer (CF2)n. This synthetic fluoropolymer of tetrafluoroethylene is hydrophobic, non-wetting, high-density, and heat-resistant, making it a highly versatile material. It is especially recognized for its non-stick characteristics.

PTFE is a high-performance engineering specialty polymer developed by Dr. Roy J. Plunkett at DuPont's Jackson Laboratory in New Jersey, USA, on April 6, 1938. This polymer exhibits remarkable characteristics, particularly in chemical inertness and heat resistance.

POLYMER SCIENCE

TFE Monomer is generally manufactured by synthesis of Calcium Fluoride (Fluorospa), Sulphuric Acid & Chloroform. The polymerisation of TFE is carried out in carefully controlled conditions to form PTFE. The chemical structure of PTFE is due to presence of stable & strong C-F bonds, PTFE molecule possess outstanding chemical inertness, high heat resistance & remarkable electrical insulation characteristics, in addition to excellent frictional properties

Company Services

- Oil And Gas
- Power Plants
- Analytical Instrument
- Process Instrumentation
- Pharmaceutical
- Orbital Welding System
- Nuclear
- Chemical/Petrochemical



GENERAL PROPERTIES

PTFE is a polymer widely utilized in the chemical, mechanical, and electronic industries:

- Chemical inertness to all known substances, although it is susceptible to attack by molten alkali metals, chlorine, trifluorides, and fluorine.
- Resistant to solvents, remaining insoluble in all solvents up to 260°C. Some highly fluorinated oils may cause swelling.
- Operating temperature range from -25°C to 260°C, applicable at atmospheric pressure.
- The metal with the least friction coefficient among all recognized metals.
- Nontoxic refers to substances that are safe and do not cause harm to living organisms or the environment.
- Resistance to radiation: the electrical properties stay nearly the same throughout.
- Outstanding resistance to weathering.
- Exceptional electrical and insulating characteristics across a broad frequency spectrum.

Chemical Process Industries

- Rods, Bushes, Sheets & Tubes
- Expansion joints – Line Bellows, Valve bellows, PTFE+GFT Composite bellows, Custom bellows
- Gaskets – Envelope, Ready cut Gaskets, Universal Rope Gaskets, Fused joint – circular – elliptical equipment envelope gaskets
- Mechanical Packing – Chevron packings, O/V/D/U Rings, Cup Seals
- Valve& Pump Components – Ball Seats, Stem Seals, Body Seals, Plug Sleeves, Diaphragms, Balls
- Laboratory Ware – Beakers, Plug cocks, Tubes
- Thread Seal Tape

Mechanical Industries

- Liners for machine tools guideways & slideways
- Piston Rings / Sodium Itched Sheet
- Low load high speed bush bearings
- Guidebands & piston seals for hydraulic & machines Pneumatic actuators / seals
- Thin walled tubings
- Hystersis – Friction washers for clutches

Electrical & Electronic Industries

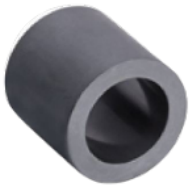
- PTFE Sintered insulation tape for insulation
- PTFE films for capacitor
- Chemically treated – Insulator bushes for traction
- PTFE Brush Holder

Glass Lined Vessels Spares

- Mainhole eleptical gaskets, Body flange gaskets, flush bottom valve seat, 'T' Bushes, Sight glass Bush Ring



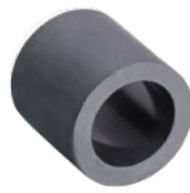
Our Products



25% CARBON
FILLED PTFE



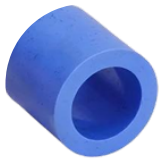
15% GRAPHITE
FILLED PTFE



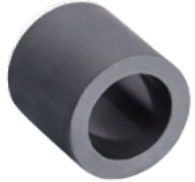
55%BRONZE HELED &
3% MOST FILLER
PIRE



60% BRONZE
FILLED PTFE:



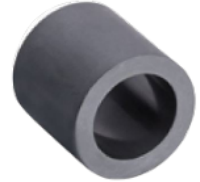
PIGMENTED
PTFE



MODIFIED
PTFE



25% GLASS FILLED
PTFE



NICKEL FILLED
PTFE



PEEK FILLED
PTFE



PTFE BUSH



GFT SEAL RING



PTFE TB BELLOW
& COVER



PTFE O RING



PTFE WEDGE



PTFE V-
PACKING



PTFE T BUSH



PTFE ENVELOP
GASKET



PTFE BODY
SEAT



PTFE RODS



PTFE L-CUP
PACKINGS



UT-CF TB/TBR
(SILICON &
CARBON)



PTFE UT-MS



CFT SEAL FACE



PP BUSH



PEEK ROD



PEEK VALVE
SEAT



PEEK BUSH



DEVLON BALL
VALVE SEAT



DEVLON RODS
AND BUSH



PEEK BACKUP
RING



ROUND CAST
NYLON GEARS



CAST NYLON
BUSH & RODS



DTEC ENGIMECH LLP

We manufacture PTFE stock shapes and design customized solutions.

