

Petrorays PRODUCTS Co

126/128, Nagdevi street, 2nd Floor, Mumbai - 400 003. India

Phone: (022) 6634 9695 / 2340 3706 / 2346 3492 Fax: +91 (022) 2340 3706

Email: info@chiragtechno.com www.chiragtechno.com

PTFE (TEFLON) RODS, SHEETS & COMPONENTS

PTFE - Wonder Polymer

A golden era has started in the world of materials science with the invention of Fluoro polymer – Poly Tetra Fluoro Ethylene (PTFE) on 6th April 1938 by Mr. Roy J Pluncket, a scientist of Du Pont Nemours U.S.A. later branded & patented as TEFLON (a registered trademark of DuPont De Nemours, U.S.A)

PTFE with its versatile characteristics like wide temperature withstanding capacity From -200°C to $+260^{\circ}\text{C}$, chemically inert, excellent dielectric properties, low water absorption, lowest co-efficient of friction, resistance to ultra violets rays, low smoke emission non adhesive, non -ageing etc. has wide industrial applications in chemicals, petrochemicals, bio-medical, electrical, electronic, mechanical, aeronautical, environmental, defence & space engineering applications.

PTFE is available in a number of forms: rod, tube, sheet, plate, tape, thin wall tubing, electrical sleeving, spiral wrapping or custom mouldings. By a special process, PTFE sheets & tape can be given an sodium etched surface suitable for adhesive bonding.



PTFE Filled Grades

Improved materials properties can be achieved by the addition of selected fillers. These Fillers extend performance characteristics & allow for wider application – particularly in demanding thermal stability & load support situation. In addition, the friction & thermal properties of PTFE remain generally unaffected.

PTFE (TEFLON) EXTRUDED RODS

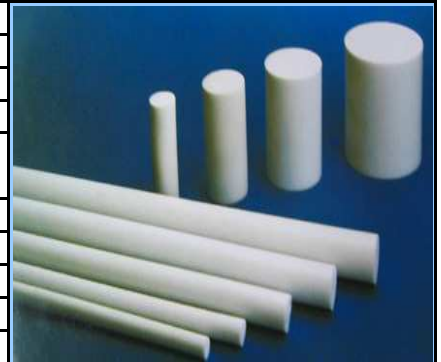
Diameter: 5mm to 100mm (Standard)

Length: 900mm or 1000mm (Standard)

Made to Order: Specific Length & Diameter Available as per customer's requirements

Materials : Virgin PTFE

Specification No: ASTM - D 1710



PTFE (TEFLON) EXTRUDED TUBES

Outer Diameter: 19mm to 100mm (Standard)

Inner Diameter: 12mm to 90mm (Standard)

Length: 1000mm (Standard)

Made to Order: Specific Length, O. D. & I.D Available as per customer's Requirements. (Minimum 3mm Wall Thickness)

Material: Virgin PTFE

Specification No: ASTM - D 3295



Petrorays PRODUCTS Co

126/128, Nagdevi street, 2nd Floor, Mumbai - 400 003. India

Phone: (022) 6634 9695 / 2340 3706 / 2346 3492 Fax: +91 (022) 2340 3706

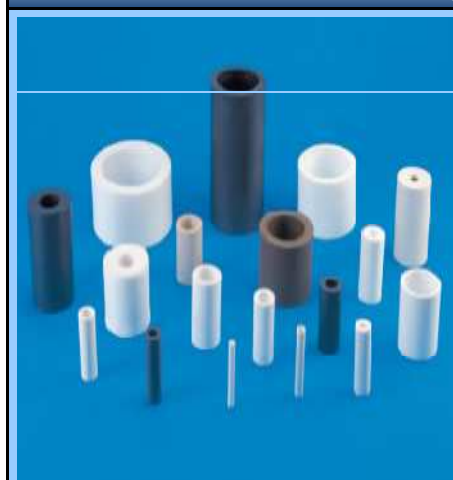
Email: info@chiragtechno.com www.chiragtechno.com

PTFE (TEFLON) MOULDED RODS

Inner Diameter: 19mm to 200mm (Standard)
Length: 300mm (Standard)
Made to Order: Specific Length & Diameter Available as per customer's Requirements.
Material: Virgin PTFE & filled PTFE
Filler: Glass / Carbon / Graphite / Bronze / Bronze + Mos ₂
Specification No: ASTM - D 1710



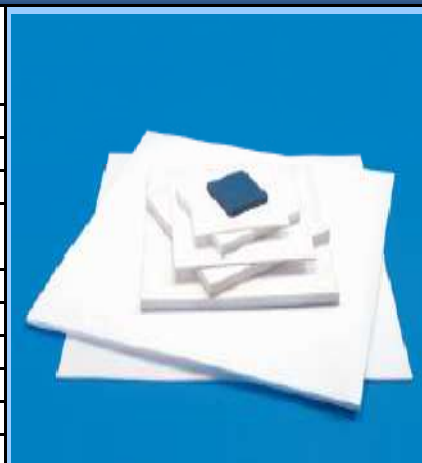
PTFE (TEFLON) MOULDED BUSHES



Outer Diameter: 19mm to 250mm (Standard)
Inner Diameter: 12.5 mm to 200mm (Standard)
Length: 100mm (Standard)
Made to Order: Specific Length, O. D. & I.D Available as per customer's Requirements. (Minimum 3mm Wall Thickness)
Material: Virgin PTFE & Filled PTFE
Filler: Glass / Carbon / Graphite / Bronze / Bronze + Mos ₂
Specification No: ASTM - D 1710

PTFE (TEFLON) MOULDED SHEETS

Standard Size: 300 x 300mm, 450 x 450mm 600 x 600mm, 1000 x 1000mm 1200 x 1200mm, 1500 x 1500
Thickness: 3mm to 25mm
Made to order: Specific Length, Width & Thickness available as per customer's requirements.
Material: Virgin PTFE & Filled PTFE
Filler: Glass / Carbon / Graphite / Bronze
Specification No: ASTM - D 3293



Petrorays PRODUCTS Co

126/128, Nagdevi street, 2nd Floor, Mumbai - 400 003. India

Phone: (022) 6634 9695 / 2340 3706 / 2346 3492 Fax: +91 (022) 2340 3706

Email: info@chiragtechno.com www.chiragtechno.com

PTFE (TEFLON) SKIVED SHEETS



Standard Width: 300mm, 450mm, 600mm, 1000mm, 1200mm, 1500mm, 2000mm

Thickness: 0.1mm to 3.0mm (Standard)

Length: Available in Roll Form in any length

Made to Order: Specific Length, Width & Thickness available as per customer's requirements

Material: Virgin PTFE & Filled PTFE

Filler: Glass / Carbon / Graphite / Bronze.

Specification No: ASTM - D 3308

PTFE MACHINED COMPONENTS & PROFILES

Chemical Industries	Mechanical Industries	Electronic & Electricals Inds.
Rods, Sheets, Bushes, Tubes	Liner for Machine tools & Guides, ways & side ways	Nozzles
Expansion Joints: Bellows	Piston rings	Sintered Insulation tapes
Valves Bellows	Bush Bearings	Capacitor films
Gaskets: Ready-Cut Gaskets	Guide bands	Brush holders
Envelopes, Rope Gaskets	Thin wall tubings'	Thin walled spaghetti tubings for insulation
Mechanical Packings:	Hydraulic & Pneumatic seals	
O/V/D/U Rings, Cup seals	Hysteris - Friction washers for clutches	
Chevron packings		
Valves & pumps Components: Balls & Diaphragm		
Lab Ware: Beaker, plug cork		

STANDARD SPECIFICATIONS

Sr. No.	Products	ASTM	BS
1	Raw Polymer	D - 1457	5184
2	Rods	D - 1710	4271 / 5130
3	Thick Walled Tubes	D - 1710	4271 / 5130
4	Thin Walled Tubes	D - 3295	4976
5	Moulded Sheets	D - 3293	3784
6	Skived Sheets / Tape	D - 3308	4893
7	Moulded Basis Shapes	D - 3294	3873

Petrorays PRODUCTS Co

126/128, Nagdevi street, 2nd Floor, Mumbai - 400 003. India

Phone: (022) 6634 9695 / 2340 3706 / 2346 3492 Fax: +91 (022) 2340 3706

Email: info@chiragtechno.com www.chiragtechno.com

GRADES	FILLER CONTENTS (WT)	PROPERTIES
Pure PTFE	-	<ul style="list-style-type: none">✓ Excellent chemical resistance✓ Out standing Flexural properties
Glass filled PTFE	25%	<ul style="list-style-type: none">✓ Higher compressive strength✓ Better wear resistance
Carbon Filled PTFE	25%	<ul style="list-style-type: none">✓ Lower coefficient of friction✓ Higher compressive strength✓ Better wear resistance
Graphite filled PTFE	25%	<ul style="list-style-type: none">✓ Better chemical resistance✓ Higher compressive strength✓ Better wear resistance
Bronze filled PTFE	60%	<ul style="list-style-type: none">✓ Better thermal conductivity✓ Lower coefficient of friction✓ Higher compressive strength✓ Better wear resistance