

CREATIVE ENGINEERS

"Beyond imagination in ptfe products"



QUALITY ASSURANCE
BEST PRICE
EFFECTIVE SERVICE

www.creativeptfe.com







About Us

We are pleased to introduce CREATIVE ENGINEERS as manufacture of PTFE moulded & machined components as per customer's requirement.

We are professionally managed organization having 20+ years technical and commercial experience in PTFE field. Our company installed latest & cost effective machineries. We are having very strong distribution network all over India.

Our company is situated at MIDC area Kupwad, Sangli in Maharashtra (India) and well connected to road, train and other industrial & modern facilities.

We have catering the needs of our valued customers with pleasure of total satisfaction to them Quality, quantity, delivery schedule, price & service.

PTFE

PTFE (POLYTETRAFLUOROETHYLENE) popularly known as TEFLON is an engineering thermoplastic with outstanding properties such as chemical inertness, low coefficient of friction, heat resistance, excellent electrical insulation properties, and non-toxic non flammable & excellent weathering resistance. Due to unique characteristics PTFE widely use in chemical, mechanical, electrical, electronics and food Industries.

We do process virgin PTFE & Filled grades like:-15-25% Glass, 25%Carbon, 15% Graphite, 40-60% Bronze, RPTFE & MOS2 etc.

Properties

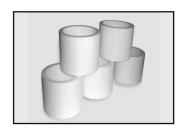
PTFE is a polymer which is extensively used in chemical, mechanical, electronics & electrical industries due to its unique characteristics.

- Chemical Inertness to all known organic and inorganic chemicals.
- Resistance to solvents, insoluble in all solvents up to 260°C.
- Wide operating temperature range (-270°C to \pm 260°C).
- Non toxic, Non-flammable.
- Self lubricating.
- Extremely low coefficient of friction.
- Negligible Water absorption.
- Resistance to Rediation
- Excellent Weathering & chemical resistance.
- Non stick, on –wetting.
- Outing electrical properties over awide frequency range.
- Excellent sealing.
- FDA compliance for food contact.

Gallery



PTFE RODS



PTFE BUSH



PTFE SHEETS



PTFE SKIVED SHEETS



PTFE VALVE SEAT



PTFE COMPONENT



PTFE ENVELOPS



PTFE BELLOWS



PTFE DIAPHRAGMS



PTFE COMPONENTS



PTFE GASKETS



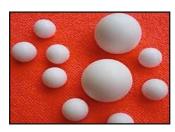
PTFE GASKETS



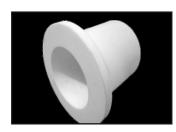
PTFE O RINGS



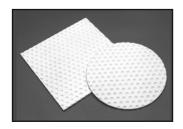
PTFE CARBON RINGS



PTFE ADAPTOR



PTFE TAPER ADAPTOR



PTFE DIMPLE SHEETS



INDUSTRIAL PARTS



BALL VALVE SEAT



VALVE SEALS

PHYSICAL PROPERTIES OF PTFE & FILLED COMPOUNDS

Sr. No.	Property	Unit	Test Method	Virgin PTFE	25% Glass Filled PTFE	15 % Glass +5% Mos ₂ Filled PTFE	25 % Carbon Filled PTFE	15 % Graphite Filled PTFE	40 % Bronze Filled PTFE	60% Bronze Filled PTFE	55 % Bronze +5% Mos ₂ Filled PTFE
1.	Density	gm/cc	ASTM D-792	2.1 - 2.2	2.24 - 2.25	2.23 - 2.24	2.12 - 2.14	2.14 - 2.16	3.1 - 3.2	3.75 - 3.8	3.8 - 3.9
2.	Tensile Strenght	kgf/cm ²	ASTM D-638	210 - 350	125 - 200	150 - 220	120 - 155	150 - 200	125 - 150	105 - 140	110 - 145
3.	Elongation of Break	%	ASTM D-638	250 - 400	200 - 300	220 - 320	100 - 150	175 - 225	100 - 175	80 - 160	90 - 165
4.	Compressive Strength	kgf/cm ²	ASTM D-695	40 -50	75 - 85	65 - 75	75 - 85	65 - 75	85 - 100	115 - 125	115 - 125
5.	Compressive Modulus	kgf/cm ²	ASTM D-695	4000	7000	6000	8400	8000	8500	8800	8800
6.	Deformation under Load										
	A. 2 Hrs. 23° C 113 kg.cm ²			12	9	10	5	6	5	4	4
	B. 24 Hrs. 23° C 113 kg.cm ²	%	ASTM D-621				7	8	6	5	5
	C. Permanent						3.5	4.5	3	2.5	2.5
	D. 2 Hrs. 150°C 113 kg.cm ²			55	50	50	35	43	42	40	
7.	Flexural Strenght	kgf/cm ²	ASTM D-790	57	42	50	96	60	85	80	80
8.	Flexural Modulus	kgf/cm ²	ASTM D-790	3500 - 6300	16700	20000	11900	11000	14000	13800	13500
9.	Impact Strength										
	A 20°C	cmkgf/cm ²	ASTM D-256	9	9.5	9	8	10	11	11	11
	B 20°C			15	11	12	10	14	9	10	10
10.	Hardness	Shore-D	ASTM D-2240	60 - 65	70 - 75	62 - 68	70 - 75	60 - 65	70- 75	70- 75	70- 75
11.	Co-efficient of Friction										
П	A. Dynamic P-7 kg/cm ² V-0.5 m/s			0.04 -0.06	0.5 - 0.54	0.15 - 0.20	0.12 - 0.17	0.11 - 0.16	0.11 - 0.15	0.12 - 0.16	0.1 - 0.14
Г	B. Static P-35 kg/cm ²	-	-	0.05 - 0.08	0.11 - 0.13	0.08- 0.01	0.09- 0.11	0.08- 0.10	0.08- 0.10	0.08-0.1	0.07 - 0.09
12.	Water Absorption	%	ASTM D-570	0	0.013	0.015	0	0	0	0	0
13.	Heat Resistance at Atm. Pressure	°C	-			-250 to	+ 260				
14.	Thermal Conductivity	10⁴cal Cal S⁴c	Cenco Fitch	6	9	9	13	14	17	19	19
15.	Linear Thermal Expansion			Axial Radial	Axial Radial	Axial Radial	Axial Radial	Axial Radial	Axial Radial	Axial Radial	Axial Radial
	A. 30- 150°c	0/	ASTM D-696	1.5 1.5	1.5 0.7	1.5 1.0	1.2 1.0	1.3 1.0	1.15 0.95	1.1 0.9	1.1 0.9
	B. 30- 250°c	%	A31W D-030	2.4 2.3	2.2 1.0	2.3 1.8	1.9 1.5	2.0 1.7	1.8 5 1.55	1.8 1.5	1.8 1.5
	C. 30- 250°c			3.4 3.6	3.2 1.4	3.3 2.2	2.7 2.4	3.0 2.5	2.55 2.25	2.5 2.2	2.5 2.2
16.	Dielectric Strength	Kv/mm	ASTM D-149	24	12	16	2	2	Conductive	Conductive	Conductive
17.	Volume Resistivity	ohm cm	ASTM D-257	10 ¹⁸	10 ¹⁵	10 ¹⁵	10⁴	10 ³	10 ⁷	10 ⁷	10 ⁷
18.	Surface Resistivity	ohm	ASTM D-258	10 ¹⁵	10 ¹⁵	10 ¹⁵	10 ⁷	10 ⁶	10°	10°	10 ⁹
19. 20.	Chemical Resistance: PTFE is chemically inert & unaffected by all known Chemical expect molten or dissolved alkali metals sodium, potassium,rubdium, pesium, francium & fluorine gas, certain fluorine compounds & complexes at elevated temperatures. Filled PTFE Has Interior Chemical resistance depending upon the particular filler. We also manufacture filled grade products with percentage of fillers as per customer's specifications.									38 Aware	from Material



- Data quoted are average values & may vary with source and garde of raw material.
- 2. Values may be used for design with consideration of factor of safety.
- Company do not accepts any responsibility of results obtained and infringement of any patents.



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