



TECHNICAL DATASHEET

PTFE stands for Poly Tetra Fluoro Ethylene. PTFE is a thermoplastic member of the fluoropolymer family of plastics. Since it was discovered nearly 75 years ago, new industrial applications of PTFE are found every day. Thanks to its outstanding physical properties.

Properties

- One of the most thermally stable plastic materials, functions up to 260° C.
- Resistance to virtually all corrosive material
- Very low co-efficient of friction
- Non-stick, Non-flammable, Non-toxic
- Excellent dielectric properties
- Excellent tensile strength even at low temperatures
- Moisture and U. V. resistance
- Virgin PTFE is approved by the Food and Drug Administration for use in food, beverage, cosmetics and pharmaceutical industries
- PTFE has relatively poor resistance to gamma radiation

PTFE SKIVED SHEETS

Standard Thickness (mm): 0.1, 0.125, 0.2, 0.25, 0.3, 0.4, 0.5, 0.75, 0.8, 0.9, 1, 1.25, 1.5, 1.75, 2, 2.5, 3, 3.5, 4, 4.5, 5, 6

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

Made to Order: Custom length, width and thickness



TECHNICAL DATASHEET

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
PHYSICAL								
Density	gm/cm ³	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
Water Absorption	24 hrs (%)	ASTM D-570	<0.01	0.013	0.015	0.05	0	0
MECHANICAL								
Tensile Strength	kgf/cm ²	ASTM D-638	210 - 350	125 - 200	150 - 220	120 - 155	150 - 200	125 - 150
Elongation of Break	%	ASTM D-638	250 - 400	200 - 300	220 - 320	100 - 150	175 - 225	100 - 175
Compressive Strength	kgf/cm ²	ASTM D-695	40 - 50	75 - 85	65 - 75	75 - 85	65 - 75	85 - 100
Compressive Modulus	kgf/cm ²	ASTM D-695	4000	7000	6000	8400	8000	8500
Deformation under load								
A. 24 Hrs. 23°C 113 kg/cm ²	%	ASTM D-621	15	11	12	7	8	6
B. 2 Hrs. 150°C 113 kg/cm ²			55	50	50	35	43	42
Flexural Strength	kgf/cm ²	ASTM D-790	57	42	50	96	60	85
Flexural Modulus	kgf/cm ²	ASTM D-790	3500-6300	16700	20000	11900	11000	14000
Impact Strength (+20°C)	cmkgf/cm ²	ASTM D-256	15	11	12	10	14	9
Hardness	Shore-D	ASTM D-2240	52 - 58	58 - 63	60 - 65	60 - 65	60 - 65	63 - 68
Co-efficient of Friction								
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
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
Brittleness Temp. at Atm. Pressure	°C	---	-200					
THERMAL								
Melting Temperature	°C	ASTM D-3418	335					
Use Temp. at Atm. Pressure	°C	---	-250 to +260					
Thermal Conductivity	10 ⁻⁴ cal/cm S°C	Cenco Fitch	6	9	9	13	14	17
ELECTRICAL								
Dielectric Strength	Kv/mm	ASTM D-149	24	12	16	2	2	Conductive
Note : 1) Data quoted are average values & may vary with source and grade of raw material. 2) Values may be used for design with consideration of factor of safety. 3) Company do not accepts any responsibility of results obtained and infringement of any patents.								

Note : 1) Data quoted are average values & may vary with source and grade of raw material. 2) Values may be used for design with consideration of factor of safety. 3) Company do not accepts any responsibility of results obtained and infringement of any patents.