



TECHNICAL DATA SHEET PTFE (WEARLON®) (WEARFLON®)

	Unit	Test method	PTFE
Mechanical Properties			
Specific gravity	-	ISO 13000-1	2,130 - 2,180
Tensile strength	MPa	ISO 13000-1	25 - 35
Elongation	%	ISO 13000-1	250 - 350
Hardness	Shore D	ISO 868	54 - 60
Deformation under load (140 Kg/cm ² for 24 hours at 23° C)	%	ASTM D695	10 - 13
Permanent deformation (After 24 hours of relaxation at 23°C)	%	ASTM D695	6 - 7.5
Coefficient of static friction		ASTM D1894	0.08 - 0.10
Coefficient of dynamic friction		ASTM D1894	0.06 - 0.08
Thermal conductivity	W/m.K	ASTM C 177	0.24
Dielectric constant (ε) at 60 Hz to 2GHz		ASTM D150	2.1
Dielectric Strength	KV/mm	ASTM D149	20 - 70
Volume Resistivity	Ohm cm	ASTM D257	10 ¹⁸
Flammability	%	UL 94	VE-0
Water absorption	%	ASTM D570	0,01
Maximum Service Temperature:			
Excellent resistance to continuous service temperatures up to 260° C and, for limited periods, even to higher temperatures; the low temperature resistance of the product allows satisfactory performance at as low -200° C.			
Chemical resistance:			
PTFE possesses a high inertness towards nearly all known chemicals. It is only attacked by elemental alkali metals, chlorine trifluoride and elemental fluorine at high temperature and pressures.			
Solvents resistance:			
PTFE is insoluble in all solvents up to temperatures as high as 300° C (572° F). Certain highly fluorinated oils only swell and dissolve PTFE at temperatures close to the crystalline melting point.			
FDA Approved:			
(Code of Federal regulation 21 CFR Ch.1, revised as of April 1, 1999 Edition) sections 175.105 - 175.300 - 176.170 - 176.180 - 177.1520 - 177.1550 - 177.2600 - 178.3570. "Perfluorocarbon Resins" of the Food and Drug Administration/USA.			

Application

- High temperature wear strips.
- Heat shrink wrap covers.
- Conveyor belts (coated glass cloth)
- Electrical insulators.
- Chemical resisting bushes and bearings.
- Valve seat, plugs, gaskets and pump components.
- Washers.

Options

SHEET: Virgin - 1200mm x 1200mm in 3mm to 13mm thickness.
 SHEET: Virgin - 610mm x 610mm from 15mm to 25.4mm thickness.
 ROLL: 1000mm & 1200mm wide in 0.8mm to 3mm thickness.
 Etched one side tape and dimpled sheet available.
 ROD: Extruded Ø6mm to Ø105mm in 2000mm lengths (typical).

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