Teflon 25% Glass Filled PTFE

STYLE 1140-02

Construction/Description

PTFE (polytetrafluoroethylene)

PTFE (polytetrafluoroethylene) is a high molecular weight polymer and one of the most versatile plastics. PTFE sheet is filled with 25% glass fibers by weight. It has excellent electrical properties and a low coefficient of friction and non-stick properties. It is resistant to wear, deformation, and creep and is suitable for service at temperatures from the cryogenic range up to 500°F.

Application/Service

These sheets are excellent for handling water, steam, chemicals, most organic solvents, corrosives, and hydraulic fluids and gases. They are generally attacked by molten alkali metals, fluorine, and chlorine trifluoride at elevated temperatures and pressue.

Product Data

Temperature Limits		pH Range	Color	Available Sheet Sizes	
Minimum	Maximum			Thickness	Sheet Size
-328°F -200°C	500°F 260°C	0-14	White	1/64", 1/32", 1/16", 3/32", 1/8", 3/16", 1/4"	48" x 48" or 60" x 60" sheets 48" or 60" wide continuous rolls

Typical Physical Properties

ASTM Test Method	Properties	Values
D638-61T	Tensile Strength at 73°F	2000-3000 PSI
D638-61T	Elongation	100-260%
D1700-61	Hardness Durometer	D55-65
D621-59	**Deformation** 73°F — 1500 PSI — 24hr 100°F — 1500 PSI — 24hr 200°F — 1500 PSI — 24hr	- 1.73% 1.91% 4.57%
D256-56	**Impact Strength, Izod** 73°F Average 170°F Average	- 2.54 ft.lb/in. 3.69 ft.lb/in.
D570-59aT	Water Absorption Static Coefficient of Friction at 73°F	.013% .085%
D150-59T	Dielectric constant (1000 cps)	2.4
D257-61	Dielectric Strength in Air	235 volts/mil.
D696-44	Coefficient of Thermal Expansion at 73°F	2.75x10^-5 in/in/°F
D177-45	Coefficient of Thermal Conductivity	3.12
D792-60T	Specific Gravity	2.20-2.30