

Teflon Mechanical Grade PTFE

STYLE 1140-01

Construction/Description

PTFE (polytetrafluoroethylene)

PTFE (polytetrafluoroethylene) is a high molecular weight polymer and one of the most versatile plastics. It has excellent electrical properties, low coefficient of friction, and non-stick properties. Mechanical grade PTFE sheet can handle virtually all chemicals in the 0-14 pH range with the exception of molten alkali metals and elemental fluorine. It is suitable for service at temperatures from the cryogenic range up to 500°F.

Application/Service

It is particularly recommended for applications in the industrial and process industries where high purity metals are required. It is excellent for handling water, steam, chemicals, most organic solvents, corrosives, hydraulic fluids, and gases.

Product Data

Temperature Limits		pH Range	Color	Available Sheet Sizes	
Minimum	Maximum			Thickness	Sheet Size
-100°F -75°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	1500-2400 PSI
D638-61T	Elongation	75-200%
D570-59aT	Water Absorption	0.00%
D150-59T	Dielectric constant (1000 cps)	2.26
D257-61	Dielectric Strength in Air	450 volts/mil.
D792-60T	Specific Gravity	2.15-2.20
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

Service is Our Business

All technical advice and recommendation are rendered by Seller free of charge. While based on data believed to be reliable, seller assumes no responsibility.