



### TEFLON Material Features

	Normal Temperature				
Material	Pressure tolerant/PSI	Minimum temperature	Maximum temperature	Material	Product Features
PTFE ( 4F )	1000	-60	160	PTFE	Self-lubricating, low torque, good elasticity, good sealing, excellent barrier to chemical solvents, but not resistant to high temperature and high pressure deformation.
TFM1600	1500	-100	200	PTFE+PFA	High hardness, suitable for steam environments (can withstand temperatures up to 230°C), but not resistant to other high-temperature fluids.
15%GF	1500	-60	180	15% glassfiber+85%PTFE	Wear-resistant, with higher compression and temperature resistance than PTFE. Chemical solvent barrier is the same as PTFE.
20%GF	1500	-60	180	20% glassfiber+80%PTFE	Wear-resistant, with higher compression and temperature resistance than PTFE. Chemical solvent barrier is the same as PTFE.
25%GF	1500	-60	180	25%glassfiber+75%PTFE	Wear-resistant, with higher compression and temperature resistance than PTFE. Chemical solvent barrier is the same as PTFE.
TF4215 ( 25%CARBON )	1500	-60	230	20% carbon fiber+ 5%graphite+ 75%PTFE	Hard carbon. Good thermal conductivity, high hardness, can withstand high temperature and high pressure environment. Suitable for service industries where steam or heat is applied. Not suitable for food and pharmaceutical industries.
UHNWPE ( UPE )	1500	-30	80		Suitable for areas where PTFE cannot be used.
50%S.S.	2000	-60	220	50%SS+50%PTFE	Excellent thermal conductivity and hardness, suitable for high temperature and high pressure environment, but higher torque.
PCTFE	2000	-180	150	PCTFE	It has heat resistance, drug resistance, good molecular strength, and is suitable for ultra-low temperature environment. However, the chemical properties are inferior to PFA, FEP and ETFE.
PA-66 · PA-6	2680	-40	100	nylon	The molecules are highly tensile and absorbent, suitable for high pressure, but not suitable for chemical liquids. It is suitable for high pressure, but not suitable for chemical liquids.
PEEK	3000	-60	260	POLY ETHER KETONE	Resistant to high pressure and high temperature, with radiation protection, excellent barrier to chemical solvents and abrasion resistance. Not suitable for concentrated acid above 70 degree Celsius.
ACETAL ( POM )	3000	-40	100	POM ( fiber reinforced plastics ) +PTFE	Good chemical resistance, high strength and hardness, good resistance to dimensional deformation. Good impact resistance at low temperature, high stability, high wear-resistant surface sliding. Good mechanical efficiency, not easy to breed bacteria. Commonly used in food processing industry, continuous working temperature above 90°C . Not suitable for oxygen environment.
GRAFOIL ( GRAPHITE )	4000	-100	600	high purity graphite	High pressure resistant, easily embrittled, suitable for bearings, oil seals and other sealing spaces (EX.Pcolciy Gasket).