

Material	Trade Names	Grade	Cost	Trace Metal Content	Chemical Compatibility	Opacity	Can be Sterilized by Irradiation?	Non-stick properties	Melt Procesable	Upper Service Temperature	Flexural Modulus (at 23° C)	Tensile Strength (at 23° C)	Elongation	Notes
PFA	Teflon, Neoflon	Highest purity grade	\$\$\$\$	Lowest	Excellent	Translucent	No	Excellent	Yes	260° C (500° F)	590 Mpa	25 Mpa	280 - 300 %	Highest purity grade PFA is the best choice for low metals content with high working temperature.
PFA	Teflon, Neoflon	Mid-level purity grade	\$\$\$	Low	Excellent	Translucent	No	Excellent	Yes	260° C (500° F)	590 Mpa	25 Mpa	280 - 300 %	Mid-level purity grade PFA offers the same high working temperature and other properties as highest purity grade PFA, but with slightly higher trace metal content, and a lower price.
FEP	Teflon, Neoflon	Highest purity grade	\$\$\$	Lowest	Excellent	Translucent (almost transparent)	No	Excellent	Yes	200° C (392° F)	540-640 Mpa	19.6-34.3	300-400 %	Savillex uses highest purity grade FEP which has almost identical trace metals content as high purity PFA, but at a lower price. Maximum working temperature is lower than PFA. FEP is also slightly less translucent then PFA, being almost transparent.
PVDF	Kynar, Solef		\$\$	Medium	Medium	Opaque	Yes	Medium?	Yes	375° C (707° F)	2200 Mpa	35 - 50 Mpa	20 - 50%	While PVDF does not have the chemical resistance or ultra low metals content of PFA/FEP, it has an extremely high working temperature, and it can be sterliized by irradiation.
ETFE	Tefzel, Neoflon		\$\$	Low	Medium	Opaque	Yes	Medium?	Yes	150°C (302° F)	1172 Mpa	40-46 Mpa	420 - 450 %	ETFE does not have the chemical resistance or the ultra low metals content of PFA/FEP, it can be sterliized by irradiation. Maximum working temeprature is also lower.
Materials below are not injection moldable and not offered by Savillex but shown for comparison purposes														
PTFE	Many suppliers		\$\$\$\$\$?	Variable and largely unknown	Excellent	Opaque	No	Excellent	No	260° C (500° F)	49.6 Mpa	20 -35 Mpa	300 - 500 %	There are many suppliers of PTFE resin, with very widely differeng levels of metals content. The machining steps involved in manufacturing PTFE parts can add significant metal contamination.
Modified PTFE	Dyneon (TFM), Hostafion		\$\$\$\$\$?	Low	Excellent	Opaque	No	Excellent	No	260° C (500° F)	n/a	33.1 Mpa	450%	Modified PTFE has lower porosity compared to PTFE. However,porosity still much higher than injection molded products. The machining steps involved in manufacturing parts from modified PTFE can add significant metal contamination.

