**PFA - PerFluoroAlkoxy**

![Chemical structure of PFA](image)

**TECHNICAL DESCRIPTION**
Because of its molecular structure, traditional PTFE cannot be processed by melting, but must be compressed into shapes and heated under pressure (sintered). In contrast, PFA is melt-processable by conventional thermoplastic processing methods, including injection, transfer, blow, and compression molding and by extrusion.

**NOTE:** PFA is available in sheets, rods and tube form

**FEP DESCRIPTION**
PerFluoroAlkoxy (PFA) offers similar properties to FEP, but is considered more of a premium resin. PFA is preferred when extended service is required in hostile environments involving chemical, thermal, and mechanical stress (chemical resistance same as PTFE). PFA offers high melt strength, stability at high processing temperatures (3 times less than PTFE), excellent crack and stress resistance, a low coefficient of friction, and more than 10 times the Flex life of FEP.

It has high resistance to creep and retention of properties after service at 240°C with useful properties at -95°C.

PFA also meets FDA 21CFR.177.1550.

PFA has an important application range in linings for pipe and chemical processing equipment roll covers, numerous wire and cable applications, including aircraft wire, plenum cable, fire alarm cable, and well logging cable.

PFA can be easy injected (complexes little pieces) and extruded

Heat-shrinkable PFA tubing is available.

PFA can be welded but it is not easy.

PFA is generally used in the same types of applications as those listed above for FEP but by higher temperature and chemical resistance.

Common PFA tradenames include Daikin Neoflon®, Dupont Teflon®, Hoechst Hostaflon®, and Ausimont Hyflon®.