

## Benefits of Fluoroelastomers (Viton®, Fluorel®, Dia-El® and Tecnoflon®)

Fluoroelastomers are high technology elastomers designed for extreme heat, oil and chemical resistance. Fluoroelastomer products are nearly equal to silicone materials in heat resistance, while resisting animal and vegetable oils, aliphatic aromatic and halogenated hydrocarbons and concentrated acids and alkalis.

Alpha Engineered Composites FluoroSeal fluoroelastomer sheet packing is especially recommended for fabrication into gaskets, seals, packings, washers, pads, shims, curtains, joints and other parts for use where severe operating conditions prevail. Alpha Engineered Composites manufactures three grades of fluoroelastomer, as shown in the following tables:

## FluoroSeal 450 — Premium Grade

Gasket sheet manufactured from 100% virgin terpolymer type B fluoroelastomer. Designed for applications that require 450° F service temperature. FluoroSeal 450 meets FSA-DSJ-401-09 for flue duct expansion joints.

Physical Property	Test Method	Typical Values	
Service Temperature		-20 to 450° F	
Hardness Durometer (Shore A)	ASTM D 2240/DIN 53505	80 (±5)	
Tensile Strength	ASTM D 412/DIN 53504	1800 psi	
Average Elongation	ASTM D 412/DIN 53504	350%	
Specific Gravity	ASTM 792	1.86	

## FluoroSeal 400 — Commercial Grade

Gasket sheet manufactured from 100% fluoroelastomer polymer. Designed for applications that require 400° F service temperature and excellent chemical resistance.

Physical Property	Test Method	Typical Values	
Service Temperature		-20 to 400° F	
Hardness Durometer (Shore A)	ASTM D 2240/DIN 53505	75 (±5)	
Tensile Strength	ASTM D 412/DIN 53504	1200 psi	
Average Elongation	ASTM D 412/DIN 53504	175%	
Specific Gravity	ASTM 792	1.83	





## FluoroSeal 350 — Industrial Grade

Gasket sheet manufactured from a blend of fluoroelastomer polymer and polyacrylates. Economically designed for applications that require 350° F service temperature and good chemical resistance.

Physical Property	Test Method	Typical Values	
Service Temperature		-20 to 350° F	
Hardness Durometer (Shore A)	ASTM D 2240/DIN 53505	75 (±5)	
Tensile Strength	ASTM D 412/DIN 53504	1200 psi	
Average Elongation	ASTM D 412/DIN 53504	225%	
Specific Gravity	ASTM 792	1.76	

## FluoroSeal Gasket Sheet Styles and Sizes

Products sold by square yard or linear yard x 48" width. Custom sizes available on request. RESTRICTIONS: Fluoroelastomers are not generally resistant to ketones, low molecular weight esters (such as ethyl acetate), or nitro hydrocarbons.

Grade	Thicknesses	Widths	Finishes
FluoroSeal 350	1/16", 1/8", 3/16", 1/4″, 1/2″	36″ or 48″	Fabric or smooth
FluoroSeal 400	1/16", 1/8", 3/16", 1/4″, 1/2″	36″ or 48″	Fabric or smooth
FluoroSeal 450	1/16", 1/8", 3/16″, 1/4″, 1/2″	36" or 48"	Fabric or smooth

# High Quality Industrial Fabrics and Composites from Alpha Engineered Composites

- EPDM sheet rubber
- Flue duct expansion joint materials
  Elastomer coated and calendered fabrics
- Silicone sheet rubber

Silicone coated fabrics

· Specialty belting

- PTFE coated fabrics and tapes
- Film and foil laminates

· Fiberglass insulation matting

· Safety clothing and welding curtain fabrics









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