

Fluoroelastomer (CFM/FKM) produced as a copolymer of vinylidene fluoride and hexafluoropropylene, offers outstanding resistance to chemicals, oils, solvents and heat. These rubbers offer moderate tensile strength but relatively low elongation properties. They are also resistant to oxidation and ozone and do not support combustion. Several versions of these rubbers are available and conventional compounding produces formulations within a hardness range of 60 to 95 Shore A. Resist a wide variety of corrosive fluids at elevated temperatures while retaining their mechanical properties. Such properties make it especially useful in automotive under-hood applications. It is particularly resistant to swell in the highly aromatic, non leaded, additive loaded gasoline mandated by environmental regulations today. Its low temperature deficiencies can be overcome somewhat by special compounding. Fluorocarbon rubber is exceptionally resistant to embrittlement when exposed to high heat over long periods of time.

Limitations: Avoid polar solvents, amines, anhydrous ammonia, hydrazine & hot acids.

Temperature Resistance: -40°C to 200°C (-40° to 390°F)

Typical Uses: O-Rings for Special Valves & Pumps, Automobile Gaskets & Seals, Parts for Semiconductor Industry.

Physical Properties:

	Excellent	Good	Fair	Poor
Tensile strength		•		
Elongation			•	
Low temperature flexibility				•
Compression Set	•			
Tear resistance			•	
Abrasion resistance		•		
Flame resistance	•			
Gas permeability	•			

Chemical Resistance:

	Excellent	Good	Fair	Poor
Ozone	•			
Weather	•			
Water	•			
Dilute acids	•			
Dilute alkalis	•			
Petroleum oils	•			
Solvents	•			
Steam			•	
Ketones			•	
Anhydrous ammonia				•