

Fluorosilicone (FVMQ)

ASTM D1418 & ISO 1629 Designation: **FVMQ**

ASTM D2000, SAE J200 Type/Class: **FK**

Mil-R-3065 (Mil-Std 417) Class: **TA**



Advantages: Superior as static seal. Resists solvents, fuel and oil while maintaining low compression set and high resiliency. Excellent weathering, ozone and heat resistance. Good for special applications where general resistance to oxidizing chemicals, aromatic and chlorinated solvent bases are required.

Limitations: High friction tendencies, limited strength and poor abrasion resistance disqualifies it for dynamic uses.

Physical & Mechanical Properties

Durometer or Hardness Range: 40-80 Shore A

Tensile Strength Range: 500 - 1,500 PSI

Elongation (Range%): 150% - 600%

Abrasion Resistance: Poor

Adhesion to Metal: Good

Adhesion to Rigid Materials: Good

Compression Set: Very Good

Flex Cracking Resistance: Very Good

Impact Resistance: Fair

Resilience/Rebound: Good

Tear Resistance: Poor

Vibration Dampening: Fair

Thermal Properties

General Temperature Range -100°F to 450°F

Min. for continuous Use (Static): -60°F

Brittle Point: -90°F

Max. for Continuous Use (Static): 350°F

Environmental Performance

Colorability: Excellent

Flame Resistance: Excellent

Gas Permeability: Poor

Odor: Good

Ozone Resistance: Excellent

Oxidation Resistance: Excellent

Radiation Resistance: Good

Steam Resistance: Fair

Sunlight Resistance: Very Good

Weather Resistance: Excellent

Water Resistance: Very Good

Chemical Resistance

Acids, Dilute: Very Good

Acids, Concentrated: Poor

Acids, Organic (Dilute): ---

Acids, Organic (Concentrated): ---

Alcohols: Good

Aldehydes: Poor

Alkalies, Dilute: Very Good

Alkalies, Concentrated: Very Good

Amines: Poor

Animal & Vegetable Oils: Very Good

Brake Fluids, Non-Petroleum Based: Poor

Diester Oils: Very Good

Esters, Alkyl Phosphate: Fair to Poor

Esters, Aryl Phosphate: Fair to Poor

Esthers: ---

Fuel, Aliphatic Hydrocarbon: Very Good

Fuel, Aromatic Hydrocarbon: Fair to Good

Fuel, Extended (Oxygenated): Good

Halogenated Solvents: Good to Excellent

Hydrocarbon, Halogenated: Poor

Ketones (MEK, acetone): Poor

Lacquer Solvents: Good

LP Gases & Fuel Oils: Poor

Mineral Oils: Very Good

Oil Resistance: Good

Petroleum Aromatic: Very Good

Petroleum Non-Aromatic: Very Good

Refrigerant Ammonia: Poor

Refrigerant Halofluorocarbons: ---

Refrigerant Halofluorocarbons w/ Oil: ---

Silicone Oil: Very Good

Solvent Resistance: Excellent