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Rubber Material Selection Guide
FVMQ or Fluorosilicone Rubber

- Abbreviation — FVMQ
- ASTM D-2000 Classification — FK
- Chemical Definition — Fluorovinyl Methyl Silioxane
- RRP Compound Number Category — 17-0000 Series

♦ Physical & Mechanical Properties

- Durometer or Hardness Range — 35 – 80 Shore A
- Tensile Strength Range — 200 – 1,500 PSI
- Elongation (Range %) — 100 % – 480 %
- Abrasion Resistance — Poor
- Adhesion to Metal — Good
- Adhesion to Rigid Materials — Fair to Good
- Compression Set — Fair to Good
- Flex Cracking Resistance — Poor to Good
- Impact Resistance — Poor to Good
- Resilience / Rebound — Poor to Fair
- Tear Resistance — Poor to Good
- Vibration Dampening — Good

♦ Chemical Resistance

- Acids, Dilute — Excellent
- Acids, Concentrated — Good
- Acids, Organic (Dilute) — Good
- Acids, Organic (Concentrated) — Fair
- Acids, Inorganic — Fair
- Alcohol's — Fair to Excellent

- **Chemical Resistance**

Aldehydes	Poor
Alkalies, Dilute	Excellent
Alkalies, Concentrated	Good
Amines	Poor
Animal & Vegetable Oils	Excellent
Brake Fluids, Non-Petroleum Based	Poor
Diester Oils	Good to Excellent
Esters, Alkyl Phosphate	Poor to Fair
Esters, Aryl Phosphate	Good to Excellent
Ethers	Fair
Fuel, Aliphatic Hydrocarbon	Excellent
Fuel, Aromatic Hydrocarbon	Good to Excellent
Fuel, Extended (Oxygenated)	Excellent
Halogenated Solvents	Good to Excellent
Hydrocarbon, Halogenated	Good to Very Good
Ketones	Poor
Lacquer Solvents	Poor
LP Gases & Fuel Oils	Excellent
Mineral Oils	Good to Excellent
Oil Resistance	Good
Petroleum Aromatic	Good
Petroleum Non-Aromatic	Good
Refrigerant Ammonia	Excellent
Refrigerant Halofluorocarbons	R-11, R-12
Refrigerant Halofluorocarbons w/ Oil	R-11, R-12
Silicone Oil	Excellent
Solvent Resistance	Excellent

Thermal Properties

Low Temperature Range	- 85º F to - 70º F
Minimum for Continuous Use (Static)	- 80º F
Brittle Point	- 85º F
High Temperature Range	+ 400º F to + 450º F
Maximum for Continuous Use (Static)	+ 450º F

Environmental Performance

Colorability	Good to Excellent
Flame Resistance	Excellent
Gas Permeability	Poor to Good
Odor	Good
Ozone Resistance	Excellent
Oxidation Resistance	Excellent
Radiation Resistance	Fair to Excellent
Steam Resistance	Fair
Sunlight Resistance	Excellent
Taste Retention	Good
Weather Resistance	Excellent
Water Resistance	Excellent

For assistance in identifying the appropriate polymer or material, or to develop and formulate a fluorosilicone rubber compound to meet your specific application and performance requirements, please contact Robinson Rubber Products at e-mail: sales@robinsonrubber.com or phone: +1-763-535-6737.