

Rubber Material Selection Guide

FVMQ or Fluorosilicone

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| Abbreviation | FVMQ |
| Chemical Definition | Fluorovinyl Methyl Silioxane |

Physical & Mechanical Properties

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|-----------------------------|------------------|
| Durometer or Hardness Range | 35 – 80 Shore A |
| Tensile Strength Range | 1.38 – 10.34 MPa |
| 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

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|-----------------------------------|-------------------|
| Acids, Dilute | Excellent |
| Acids, Concentrated | Good |
| Acids, Organic (Dilute) | Good |
| Acids, Organic (Concentrated) | Fair |
| Acids, Inorganic | Fair |
| Alcohol's | Fair to Excellent |
| 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 |
| 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 |
| Silicone Oil | Excellent |
| Solvent Resistance | Excellent |

Thermal Properties

| | |
|-------------------------------------|------------------|
| Low Temperature Range | -65°C to -57°C |
| Minimum for Continuous Use (Static) | -62°C |
| Brittle Point | -65°C |
| High Temperature Range | +204°C to +232°C |
| Maximum for Continuous Use (Static) | +232°C |

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 |
| Weather Resistance | Excellent |
| Water Resistance | Excellent |

For assistance in identifying the appropriate polymer or material, or to develop and formulate a rubber compound to meet your specific application and performance requirements, please contact Zeta Chemicals.