

Rubber Material Selection Guide FVMQ or Fluorosilicone Rubber

AbbreviationFVMQ

ASTM D-2000 Classification

Chemical Definition
 Fluorovinyl Methyl Silioxane

■ RRP Compound Number Category 17-0000 Series

Physical & Mechanical Properties

Durometer or Hardness Range
 Tensile Strength Range
 Elongation (Range %)
 35 – 80 Shore A
 200 – 1,500 PSI
 100 % – 480 %

Abrasion ResistanceAdhesion to MetalGood

Adhesion to Rigid Materials

Compression Set

Fair to Good

Flex Cracking Resistance

Impact Resistance

Resilience / Rebound

Tear Resistance

Poor to Good

Poor to Fair

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'sFair to Excellent



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Chemical Resistance

Aldehydes

Alkalies, Dilute
 Excellent

■ Alkalies, Concentrated Good

Amines

Animal & Vegetable OilsExcellent

Brake Fluids, Non-Petroleum BasedPoor

Diester OilsGood 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

Lacquer SolventsPoor

■ LP Gases & Fuel Oils Excellent

Mineral Oils
Good to Excellent

■ Oil Resistance Good

Petroleum AromaticGood

Petroleum Non-AromaticGood

Refrigerant AmmoniaExcellent

■ Refrigerant Halofluorocarbons R-11, R-12

■ Refrigerant Halofluorocarbons w/ Oil R-11, R-12

■ Silicone Oil Excellent

Solvent Resistance Excellent



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Thermal Properties

■ Low Temperature Range - 85° F to - 70° F

Minimum for Continuous Use (Static) - 80° F
 Brittle Point - 85° F

■ High Temperature Range + 400° F to + 450° F

■ Maximum for Continuous Use (Static) + 450° F

Environmental Performance

Colorability
 Good to Excellent

■ Flame Resistance Excellent

Gas Permeability
 Poor to Good

■ Odor Good

■ Ozone Resistance Excellent

Oxidation Resistance Excellent

Radiation ResistanceFair 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 polyacrylate / acrylic 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.

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