

**VMQ, PMQ, or PVMQ
Silicone Rubber**

◆ **Physical & Mechanical Properties**

▪ Durometer or Hardness Range	20 – 90 Shore A
▪ Tensile Strength Range	200 – 1,500 PSI
▪ Elongation (Range %)	100 % – 900 %
▪ Abrasion Resistance	Poor to Good
▪ Adhesion to Metal	Good
▪ Adhesion to Rigid Materials	Good
▪ Compression Set	Good to Excellent
▪ Flex Cracking Resistance	Poor to Good
▪ Impact Resistance	Poor to Good
▪ Resilience / Rebound	Good to Excellent
▪ Tear Resistance	Poor to Good
▪ Vibration Dampening	Fair to Good

◆ **Chemical Resistance**

▪ Acids, Dilute	Fair to Good
▪ Acids, Concentrated	Poor to Fair
▪ Acids, Organic (Dilute)	Good
▪ Acids, Organic (Concentrated)	Fair
▪ Acids, Inorganic	Fair to Good

**VMQ, PMQ, or PVMQ
Silicone Rubber**

◆ **Chemical Resistance**

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

**VMQ, PMQ, or PVMQ
Silicone Rubber**

◆ **Thermal Properties**

- Low Temperature Range - 178° F to - 90° F
- Minimum for Continuous Use (Static) - 170° F
- Brittle Point - 178° F to - 60° F
- High Temperature Range + 400° F to + 550° F
- Maximum for Continuous Use (Static) + 550° F

◆ **Environmental Performance**

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

For assistance in identifying the appropriate polymer or material, or to develop and formulate a silicone rubber compound to meet your specific application and performance requirements, please contact Alva Rubber Products at e-mail: ventas@alvarubber.com.mx or phone: (55) 21 59 72 73

Alva Rubber Products Company, Inc. makes no expressed or implied warranty as to any qualities, attributes, or characteristics of any polymer or material. This information is provided for reference only.