

Abbreviation VMQ, PMQ, PVMQ

Chemical Definition Polydimethylsiloxane

Physical & Mechanical Properties

Durometer or Hardness Range 20 - 90 Shore A
Tensile Strength Range 14 - 105 kg/cm²
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

Thermal Properties

Low Temperature Range - 116,6 °C to - 67,7 °C
Minimum for Continuous Use (Static) - 112,2 °C
Brittle Point - 116,6 °C to - 51,1 °C
High Temperature Range + 204,4 °C to + 287,7 °C
Maximum for Continuous Use (Static) + 287,7 °C

Environmental Performance

Colorability, Excellent
Flame Resistance, Fair to Excellent
Gas Permeability, Poor to Fair
Odor, Good
Ozone Resistance, Excellent
Oxidation Resistance, Excellent

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
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
Refrigerant Halofluorocarbons, Poor
Refrigerant Halofluorocarbons w/ Oil, Poor
Silicone Oil, Poor
Solvent Resistance, Poor