

Proper selection of Material is vital for proper seal

Material	General Properties	Common Applications
Buna-N (Nitrile / NBR) 70 Durometer Black	Good resistance to petroleum, hydrocarbons, fuels. Widely used with most oils, hydraulic fluids, alcohol. Poor resistance to sunlight, weathering and ozone. Many compound variations for specific applications. The least expensive most readily available material. Basic temperature range: -40 F to +250 F*	Petroleum Oil Seals Hydraulic Fluid Seals Water / Greases Transmission Fluid Seals
Viton® (Fluorocarbon) 75 Durometer Black	Excellent temperature and chemical resistance. Excellent mechanical and physical properties. Low compression set and low gas permeability. Not for use with Acetone, Skydrol, or ethyl Acetate. Basic temperature range: -20 F to +400 F*	Vacuum Seals Many Acids and Fuels Heat Resistance Many Chemicals Many Solvents
Silicone 70 Durometer Red/Orange	Broad temperature range. Odorless / non-toxic. Resistance to sun and ozone. Fungus resistance. Poor tear and abrasion strength. Poor resistance to oils. Basic temperature range: -80 F to +400 F*	Dry heat Alcohol / Oxygen Electrical / Medical Low Temperature
EPDM / EPR (Ethylene Propylene) 70 Durometer Black	Resistance to sunlight, weathering and ozone. Poor resistance to petroleum oils and fuel. Good heat and compression set resistance. Basic temperature range: -65 F to +250 F*	Steam / Hot water Hydraulic / Skydrol Some Chemicals Auto Brake Systems Alcohol / Greases
Viton® ETP (Viton® Extreme)	Superior chemical resistance vs. standard Viton®. Other properties similar to standard Viton®. For use between standard Viton® and Kalrez® Basic temperature range: -5 F to +400 F*	Chemical Resistance For use between standard Viton® and Kalrez®
Chemraz® Simriz® Kalrez® (Perfluoroelastomer)	High temperature and chemical resistance. Excellent resistance to chemicals. Excellent outgassing performance in vacuums. Low compression set. Various compounds for specific applications. Basic temperature range: -10 F to +600 F* Simriz® = performance and savings.	Click for Specific Compound Info: Chemraz® Simriz® Kalrez®
Encapsulated FEP or PFA	Common core materials: Silicone, Viton, SS Spring Chemical resistance of FEP/PFA with compression set resistant core. Basic temperature range: Depends on core material.	Chemical resistance of FEP/PFA with compression set resistant core.
PTFE®	Excellent temperature range. Various chemical and fuel resistance. Low coefficient of friction. Non-elastic. Basic temperature range: -250 F to +450 F*	Temperature Range Chemicals / Fuels Non-elastic
Neoprene (Chloroprene)	Good resistance to petroleum oils. Low compression set and good abrasion strength. Good resistance to weathering, sunlight and ozone. Basic temperature range: -40 F to +225 F*	Refrigeration Seals Freon / Air Conditioning Motor Mounts Engine Coolants
Fluorosilicone	Wide range of fluid and chemical resistance. Large temperature range. A blend of Viton® and Silicone. Basic temperature range: -80 F to +350 F*	Aircraft fuel systems Jet Fuel / Gasoline Petroleum Oils Synthetic Jet Oil
Urethane (polyurethane)	Available in High and Low Grades Excellent wear/abrasion and extrusion resistance. Poor compression set and chemical resistance. Basic temperature range: -65 F to +225 F*	High Pressure Hydraulics Drive Belts