

# Standard Material Comparisons

Polymer	Generally Resistant to:	Generally not used for:	General Properties
<b>NBR, Nitrile, Buna N</b> Temp: -30F to 275F	Fuel and Oil resistant Mineral & Vegetable Oils Animal Fats & Oils Aliphatic Hydrocarbons Aromatic Hydrocarbons Non-polar Solvents	Halogenated Solvents Oxygenated Solvents Outdoor exposure Ozone Brake Fluids	Good wear resistance Good Compression Set Good dynamic properties Low water absorption
<b>Neoprene</b> (Polychloroprene) Temp: -80F to 250F	Oils Alkalis Acids Water Salts Sunlight & Ozone	Aliphatic Hydrocarbons Aromatic Hydrocarbons	Abrasion Tensile Strength Flex Properties Cut Resistance Flame Resistance
<b>EPDM (EthelenePropolene)</b> Temp: -60F to 350F	Hot water/steam Brake Fluids Sunlight, Ozone, Weathering some Acids & Bases Keytones and Alcohols	Petroleum Oils Fuels	Good wear resistance Good Compression Set Moderate short term resilience Good permeation resistance
<b>Hypalon CPE</b> (Chlorosulfanated Polyethelene) Temp: -65F to 300F	Oils Aliphatic Hydrocarbons Sunlight & Ozone Akalais Dilute Acids	Halogenated Solvents Oxygenated Solvents	Abrasion Resistance Flame resistant Good compression set Flex Properties
<b>Natural Rubber</b> Temp: -75F to 200F	Alkalis Acids Water Inorganic salts	Oils Aliphatic Solvents Aromatic Solvents Halogenated Solvents Oxygenated Solvents	Abrasion Resistance High tensile strngth Good resilience
<b>Silicone</b> Temp: -175F to 500F	Alkalis Acids Water Inorganic salts	Oils Aliphatic Solvents Aromatic Solvents Halogenated Solvents Oxygenated Solvents Sulfuric Acid	Excellent temperature range Good release properties Weather & ozone resistant Strength at high temperature Good compression set
<b>VITON™</b> Temp: -30F to 450F	Vacuum Most acids & chemicals Petroleum Oils & Fuels Silicone oils & greases Di-Ester Lubricants	Oxygenated Solvents Brake fluids Ammonia Ethyl Accetate Acetone, Skydrol	Good wear resistance Excellent compression set Moderate short term resilience  Note: very high cost

Examples:

Aromatic Hydrocarbons - toluene, xylene

Aliphatic Hydrocarbons - Kerosene, gasoline, naptha, hexane, mineral spirits, lubricants & greases

Halogenated Solvents - methylene chloride, per/trichlorethylene

Oxygenated Solvents - ketones, MEK, MIBK, acetone

Other polymers include Carboxylated Nitrile, Hydragenated Nitrile, Millable Urethane, Cast Polyurethane and Polyacrilate  
Information available on request. Basic physical properties available for all compounds on request.



Please Note: This is sheet does not contain detailed technical information and is to be used as a guide only.