

**Chemical Compatibility for the following  
O-rings Elastomers:  
Ethylene Propylene, Fluorosilicone, Nitrile  
(Buna N), and Silicone**

**Technical Report  
TR-60D  
(Rev. Ø)**



19650 Pauling  
Foothill Ranch, CA 92610-2610  
Tel (949) 460-2100  
Fax (949) 460-2300  
Email: [sales@balseal.com](mailto:sales@balseal.com)  
[www.balseal.com](http://www.balseal.com)

Spinozastraat 1  
1018 HD Amsterdam  
The Netherlands  
Tel +31 20 638 6523  
Fax +31 20 625 6018  
Email: [sales@balseal.nl](mailto:sales@balseal.nl)  
[www.balseal.nl](http://www.balseal.nl)

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## 1.0 DISCUSSION

These tables list the chemical compatibility chart of various elastomer materials commonly used for o-ring. This data has been compiled from literature published by various material suppliers. It is given as background information only. In any given case, factors such as concentration, temperature, degree of agitation and presence of impurities influence the rate of corrosion. The user, through their own testing and evaluation, must determine the suitability of the material for the application.

## 2.0 GUIDE TO COMPATIBILITY KEY

<b>Key to O-Ring Material Compatibility Ratings</b>	
(4)	Good, both for static and dynamic seals
(3)	Fair, usually acceptable for static seals
(2)	Sometimes acceptable for static seals; not acceptable for dynamic seals
(1)	Poor
(0)	No Data

## 3.0 CHEMICAL COMPATIBILITY GUIDE FOR ELASTOMER MATERIALS

In addition to this chemical compatibility chart, report TR-60D, Bal Seal has three other reports: report TR-60A “Chemical Compatibility Guide for Bal Seal PTFE, Filled PTFE, and Polyethylene Seal Materials,” report TR-60B “Chemical Resistance to Typical [*HPLC High Pressure Liquid Chromatography*] Solutions, Using Typical Bal Seal Products Used in Such Applications”, and TR-60C “Compatibility Guide for Metallic Materials” Consult the Technical Sales Department for further details or materials not listed.

## 4.0 References

1) Efundu, Engineering Fundamentals, <http://www.efunda.com/home.cfm>

## Chemical Compatibility of Ethylene Propylene

<u>Acetaldehyde (1)</u>	<u>Acetamide (4)</u>	<u>Acetic Acid, Glacial (4)</u>
<u>Acetic Anhydride (4)</u>	<u>Acetone (4)</u>	<u>Acetophenone (4)</u>
<u>Acetyl Chloride (1)</u>	<u>Acetylene Gas (4)</u>	<u>Acrylonitrile (1)</u>
<u>Air below 200 C (1)</u>	<u>Alkazene (0)</u>	<u>Aluminium Acetate (4)</u>
<u>Aluminium Chloride (4)</u>	<u>Aluminium Flouride (4)</u>	<u>Aluminium Nitrate (4)</u>
<u>Aluminium Sulfate (4)</u>	<u>Ammonia, Anhydrous (4)</u>	<u>Ammonia, Gas, Cold (4)</u>
<u>Ammonia, Gas, Hot (3)</u>	<u>Ammonium Carbonate (4)</u>	<u>Ammonium Chloride (4)</u>
<u>Ammonium Hydroxide, Concentrated (2)</u>	<u>Ammonium Nitrate (4)</u>	<u>Ammonium Persulfate Solution (3)</u>
<u>Ammonium Phosphate (4)</u>	<u>Ammonium Sulfate (4)</u>	<u>Amyl Acetate (4)</u>
<u>Amyl Alcohol (4)</u>	<u>Amyl Borate (1)</u>	<u>Amyl Chloronaphthalene (1)</u>
<u>Aniline (4)</u>	<u>Aniline Oil (3)</u>	<u>Animal Oil (4)</u>
<u>Arachlor 1248 (3)</u>	<u>Argon (4)</u>	<u>Aromatic Fuel 50% (1)</u>
<u>Askarel Transformer Oil (1)</u>	<u>ASTM Fuel A (1)</u>	<u>ASTM Fuel B (1)</u>
<u>ASTM Fuel C (1)</u>	<u>ASTM Fuel D (1)</u>	<u>ASTM Oil Four (1)</u>
<u>ASTM Oil One (4)</u>	<u>ASTM Oil Three (1)</u>	<u>ASTM Oil Two (1)</u>
<u>Automatic Transmission Fluid (1)</u>	<u>Automotive Brake Fluid (4)</u>	<u>Beer (4)</u>
<u>Benzaldehyde (4)</u>	<u>Benzene (1)</u>	<u>Benzene Sulfonic Acid (1)</u>
<u>Benzine (Ligroin) (1)</u>	<u>Benzoic Acid (0)</u>	<u>Benzophenone (3)</u>
<u>Benzyl Alcohol (3)</u>	<u>Benzyl Benzoate (3)</u>	<u>Benzyl Chloride (1)</u>
<u>Bleach Liquor (4)</u>	<u>Borax Solutions (4)</u>	<u>Boric Acid (4)</u>
<u>Brake Fluid (4)</u>	<u>Bromine Gas (1)</u>	<u>Bromobenzene (1)</u>
<u>Bunker Oil (1)</u>	<u>Butadiene Monomer (0)</u>	<u>Butane (1)</u>
<u>Butter (4)</u>	<u>Butyl Alcohol (3)</u>	<u>Butyl Carbitol (4)</u>
<u>Butyl Cellosolve (4)</u>	<u>Butyraldehyde (2)</u>	<u>Calcium Carbonate (4)</u>
<u>Calcium Chloride (4)</u>	<u>Calcium Hydroxide (4)</u>	<u>Calcium Hypochlorite (4)</u>
<u>Calcium Nitrate (4)</u>	<u>Calcium Sulfide (4)</u>	<u>Carbitol 2 (3)</u>
<u>Carbolic Acid (Phenol) (1)</u>	<u>Carbon Disulfide (1)</u>	<u>Carbon Monoxide (4)</u>
<u>Carbon Tetrachloride (1)</u>	<u>Carbonic Acid (4)</u>	<u>Castor Oil (3)</u>
<u>Cellosolve (3)</u>	<u>China Wood Oil, Tung Oil (1)</u>	<u>Chloracetic Acid (3)</u>
<u>Chlordane (1)</u>	<u>Chlorinated Solvents (1)</u>	<u>Chlorine Dioxide (1)</u>
<u>Chlorine Trifluoride (1)</u>	<u>Chlorine, Dry (0)</u>	<u>Chlorine, Wet (0)</u>
<u>Chloroform (1)</u>	<u>Chlorosulfonic Acid (1)</u>	<u>Chrome Plating Solution (1)</u>
<u>Chromic Acid (1)</u>	<u>Citric Acid (4)</u>	<u>Cod Liver Oil (4)</u>
<u>Coffee (4)</u>	<u>Coolanol Monsanto (1)</u>	<u>Corn Oil (0)</u>
<u>Creosote, Coal Tar (1)</u>	<u>Creosylic Acid (1)</u>	<u>Crude Oil (Asphalt Base) (1)</u>
<u>Cyclohexane (1)</u>	<u>Denatured Alcohol (4)</u>	<u>Diacetone (4)</u>

## Chemical Compatibility of Ethylene Propylene

<u>Diacetone Alcohol (4)</u>	<u>Dibenzyl Ether (2)</u>	<u>Dibutyl Phthalate (4)</u>
<u>Dichloro-Butane (1)</u>	<u>Diesel Oil (1)</u>	<u>Di-ester Lubricant MIL-L-7808 (1)</u>
<u>Diethylamine (3)</u>	<u>Diethylamine Glycol (4)</u>	<u>Dimethyl Formamide (3)</u>
<u>Dimethyl Phthalate (3)</u>	<u>Dioxane (3)</u>	<u>Diphenyl (1)</u>
<u>Dow Corning 550 (4)</u>	<u>Dow Guard (4)</u>	<u>Dowtherm A (3)</u>
<u>Elco 28 Lubricant (1)</u>	<u>Epoxy Resins (4)</u>	<u>Ethane (1)</u>
<u>Ethanol (4)</u>	<u>Ethyl Acetoacetate (1)</u>	<u>Ethyl Alcohol (4)</u>
<u>Ethyl Benzene (1)</u>	<u>Ethyl Benzoate (0)</u>	<u>Ethyl Cellulose (3)</u>
<u>Ethyl Chloride (4)</u>	<u>Ethyl Chlorocarbonate (1)</u>	<u>Ethyl Diamine (4)</u>
<u>Ethyl Ether (1)</u>	<u>Ethyl Formate (3)</u>	<u>Ethyl Hexanol (4)</u>
<u>Ethyl Mercaptan (0)</u>	<u>Ethyl Oxalate (0)</u>	<u>Ethyl Pentachlorobenzene (1)</u>
<u>Ethyl Silicate (4)</u>	<u>Ethylene (1)</u>	<u>Ethylene Dichloride (1)</u>
<u>Ethylene Glycol (4)</u>	<u>Ethylene Oxide (3)</u>	<u>Ethylene Trichloride (1)</u>
<u>Formaldehyde (4)</u>	<u>Freon 11 (M) (1)</u>	<u>Freon 112 (1)</u>
<u>Freon 113 (1)</u>	<u>Freon 114 (1)</u>	<u>Freon 114B2 (1)</u>
<u>Freon 12 (2)</u>	<u>Freon 13 (4)</u>	<u>Freon 21 (1)</u>
<u>Freon 22 (4)</u>	<u>Freon 31 (4)</u>	<u>Freon 32 (4)</u>
<u>Freon 502 (F22+F316) (4)</u>	<u>Freon C318 (4)</u>	<u>FREON R134A (0)</u>
<u>Freon TF (1)</u>	<u>Fuel Oil (1)</u>	<u>Furan (1)</u>
<u>Furfural (3)</u>	<u>Furfuryl Alcohol (3)</u>	<u>Gallic Acid (3)</u>
<u>Gasoline, Automotive (1)</u>	<u>Gelatine (4)</u>	<u>Glucose (4)</u>
<u>Glycerin (4)</u>	<u>Glycol, General (4)</u>	<u>Grease, Petroleum Base (1)</u>
<u>Helium (4)</u>	<u>Heptane (1)</u>	<u>Hexane (1)</u>
<u>Hexyl Alcohol (3)</u>	<u>Hydraulic Oil, Petroleum Base (1)</u>	<u>Hydrochloric Acid (2)</u>
<u>Hydrobromic Acid (0)</u>	<u>Hydrobromic Acid, Gas (4)</u>	<u>Hydrogen Gas (4)</u>
<u>Hydrocyanic Acid (4)</u>	<u>Hydrofluoric Acid (0)</u>	<u>Iodine (3)</u>
<u>Hydrogen Peroxide (0)</u>	<u>Hydroquinone (0)</u>	<u>Isopropanol (4)</u>
<u>Iso Octane (4)</u>	<u>Isobutyl Alcohol (4)</u>	<u>Isopropyl Ether (1)</u>
<u>Isopropyl Acetate (3)</u>	<u>Isopropyl Chloride (1)</u>	<u>JP 5 MIL-J5624 (1)</u>
<u>JP 3 MIL-J5624 (1)</u>	<u>JP 4 MIL-J5624 (1)</u>	<u>Lacquer Solvents (1)</u>
<u>JP 6 MIL-J5624 (1)</u>	<u>Kerosene (1)</u>	<u>Lindol, Hydraulic Fluid (Phosphate Ester Type) (4)</u>
<u>Lacquers (1)</u>	<u>Lard, Animal Fat (3)</u>	<u>Liquefied Petroleum Gas (LPG) (1)</u>
<u>Lubricating Oils, Petroleum Base (1)</u>	<u>Linsed Oil (2)</u>	<u>Malathion (1)</u>
<u>Maleic Acid (1)</u>	<u>Lye (4)</u>	<u>Mercury (4)</u>
<u>Methane (1)</u>	<u>Mercuric Chloride (4)</u>	<u>Methyl Acetate (3)</u>
	<u>Methanol (4)</u>	

## Chemical Compatibility of Ethylene Propylene

<u>Methyl Acrylate (3)</u>	<u>Methyl Alcohol (4)</u>	<u>Methyl Bromide (0)</u>
<u>Methyl Butyl Ketone (4)</u>	<u>Methyl Cellosolve (3)</u>	<u>Methyl Chloride (1)</u>
<u>Methyl Ether (4)</u>	<u>Methyl Ethyl Ketone (MEK) (4)</u>	<u>Methyl Isobutyl Ketone (MIBK) (3)</u>
<u>Methyl Mercaptan (4)</u>	<u>Methyl Methacrylate (1)</u>	<u>Methyl Oleate (3)</u>
<u>Methyl Propyl Salicylate (3)</u>	<u>Methylacrylic Acid (3)</u>	<u>Methylene Chloride (0)</u>
<u>MIL-F-25558 (RJ-1) (1)</u>	<u>MIL-F-25656 (1)</u>	<u>MIL-G-25760 (1)</u>
<u>MIL-H-5606 (1)</u>	<u>MIL-H-7083 (4)</u>	<u>MIL-J 5624, JP-3, JP-4, JP-5 (1)</u>
<u>Milk (4)</u>	<u>MIL-L-25681 (4)</u>	<u>MIL-R-25576 (RP-1) (1)</u>
<u>MIL-S-3136, Type 1 Fuel (1)</u>	<u>MIL-S-81087 (4)</u>	<u>Mineral Oils (1)</u>
<u>Monovinyl Acetate (3)</u>	<u>Naphtha (1)</u>	<u>Naphthalene (1)</u>
<u>Naphthalenic (1)</u>	<u>Natural Gas (1)</u>	<u>Neatsfoot Oil (3)</u>
<u>N-Hexaldehyde (0)</u>	<u>Nitric Acid (0)</u>	<u>Nitrobenzene (4)</u>
<u>Nitroethane (3)</u>	<u>Nitrogen Tetroxide (0)</u>	<u>Nitrogen, Gas (4)</u>
<u>Nitromethane (3)</u>	<u>Nitropropane (3)</u>	<u>N-Octane (1)</u>
<u>N-Pentane (1)</u>	<u>Octyl Alcohol (3)</u>	<u>Oleic Acid (2)</u>
<u>Oleum (Fuming Sulfuric Acid) (1)</u>	<u>Oronite 8200 (1)</u>	<u>Oxalic Acid (4)</u>
<u>Oxygen, 200-400F (1)</u>	<u>Oxygen, Cold (4)</u>	<u>Ozone (4)</u>
<u>Peanut Oil (2)</u>	<u>Petroleum Oil (1)</u>	<u>Phenol (1)</u>
<u>Phenylhydrazine (1)</u>	<u>Phosphoric Acid (4)</u>	<u>Phosphoric Trichloride (4)</u>
<u>Pine Oil (1)</u>	<u>Potassium Nitrate (4)</u>	<u>Potassium Sulfate (4)</u>
<u>Producer Gas (1)</u>	<u>Propane (1)</u>	<u>Propanol (4)</u>
<u>Propyl Acetate (3)</u>	<u>Propyl Alcohol (4)</u>	<u>Propylene (1)</u>
<u>Propylene Oxide (3)</u>	<u>Pydraul, 10E (3)</u>	<u>Pydraul, 230C, 312F, 540C (1)</u>
<u>Pydraul, 30E, 50E, 65E, 90E (3)</u>	<u>Pyranol, Transformer Oil (1)</u>	<u>Pyrogard 42, 43, 53, 55 (Phosphate Ester) (4)</u>
<u>Radiation (2)</u>	<u>Rapeseed Oil (4)</u>	<u>Red Oil (2)</u>
<u>RJ-1 (MIL-F-25558) (1)</u>	<u>RP-1 (MIL-R-25576) (1)</u>	<u>Sea Water (4)</u>
<u>Silicone Grease (4)</u>	<u>Silicone Oils (4)</u>	<u>Silver Nitrate (4)</u>
<u>Skydrol 500 (4)</u>	<u>Sodium Bicarbonate (4)</u>	<u>Sodium Carbonate (4)</u>
<u>Sodium Chloride (4)</u>	<u>Sodium Hydroxide (4)</u>	<u>Soyabean Oil (1)</u>
<u>Steam to 350F (4)</u>	<u>Stearic Acid (3)</u>	<u>Stoddard Solvent (1)</u>
<u>Styrene Monomer (1)</u>	<u>Sucrose Solutions (4)</u>	<u>Sulfur Chloride (1)</u>
<u>Sulfur Dioxide Gas, Dry (4)</u>	<u>Sulfur Dioxide Gas, Wet (4)</u>	<u>Sulfur Dioxide, Liquefied Under Pressure (4)</u>
<u>Sulfur Hexafluoride (4)</u>	<u>Sulfur Trioxide (2)</u>	<u>Sulfuric Acid (Concentrated) (0)</u>
<u>Sulfurous Acid (4)</u>	<u>Tannic Acid (4)</u>	<u>Tartaric Acid (2)</u>
<u>Tertiary Butyl Alcohol (3)</u>	<u>Tertiary Butyl Mercaptan (1)</u>	<u>Tetrabromoethane (1)</u>

## Chemical Compatibility of Ethylene Propylene

<u>Tetrabutyl Titanate (4)</u>	<u>Tetrachloroethane (1)</u>	<u>Tetrachloroethylene (1)</u>
<u>Tetraethyl Lead (1)</u>	<u>Tetrahydrofuran (1)</u>	<u>Tetralin (1)</u>
<u>Toluene (1)</u>	<u>Transmission Fluid, Type A (1)</u>	<u>Triethanolamine (4)</u>
<u>Turbine Oil (1)</u>	<u>Turpentine (1)</u>	<u>Varnish (1)</u>
<u>Vinegar (4)</u>	<u>VV-H-910 (4)</u>	<u>Wagner 21B Brake Fluid (4)</u>
<u>Water, Fresh (4)</u>	<u>Whiskey (4)</u>	<u>White Pine Tar (1)</u>
<u>Xylene (1)</u>		

## Chemical Compatibility of Fluorosilicone

<u>Acetaldehyde (0)</u>	<u>Acetamide (4)</u>	<u>Acetic Acid, Glacial (1)</u>
<u>Acetic Anhydride (1)</u>	<u>Acetone (1)</u>	<u>Acetophenone (1)</u>
<u>Acetyl Chloride (4)</u>	<u>Acetylene Gas (2)</u>	<u>Acrylonitrile (1)</u>
<u>Air below 200 C (4)</u>	<u>Alkazene (3)</u>	<u>Aluminium Acetate (1)</u>
<u>Aluminium Chloride (4)</u>	<u>Aluminium Flouride (4)</u>	<u>Aluminium Nitrate (0)</u>
<u>Aluminium Sulfate (4)</u>	<u>Ammonia, Anhydrous (1)</u>	<u>Ammonia, Gas, Cold (0)</u>
<u>Ammonia, Gas, Hot (1)</u>	<u>Ammonium Carbonate (0)</u>	<u>Ammonium Chloride (1)</u>
<u>Ammonium Hydroxide, Concentrated (4)</u>	<u>Ammonium Nitrate (2)</u>	<u>Ammonium Persulfate Solution (0)</u>
<u>Ammonium Phosphate (0)</u>	<u>Ammonium Sulfate (4)</u>	<u>Amyl Acetate (1)</u>
<u>Amyl Alcohol (4)</u>	<u>Amyl Borate (0)</u>	<u>Amyl Chloronaphthalene (3)</u>
<u>Aniline (2)</u>	<u>Aniline Oil (2)</u>	<u>Animal Oil (4)</u>
<u>Arachlor 1248 (3)</u>	<u>Argon (3)</u>	<u>Aromatic Fuel 50% (3)</u>
<u>Askarel Transformer Oil (3)</u>	<u>ASTM Fuel A (3)</u>	<u>ASTM Fuel B (3)</u>
<u>ASTM Fuel C (3)</u>	<u>ASTM Fuel D (0)</u>	<u>ASTM Oil Four (3)</u>
<u>ASTM Oil One (4)</u>	<u>ASTM Oil Three (4)</u>	<u>ASTM Oil Two (4)</u>
<u>Automatic Transmission Fluid (0)</u>	<u>Automotive Brake Fluid (1)</u>	<u>Beer (4)</u>
<u>Benzaldehyde (1)</u>	<u>Benzene (3)</u>	<u>Benzene Sulfonic Acid (3)</u>
<u>Benzine (Ligroin) (4)</u>	<u>Benzoic Acid (3)</u>	<u>Benzophenone (4)</u>
<u>Benzyl Alcohol (3)</u>	<u>Benzyl Benzoate (4)</u>	<u>Benzyl Chloride (3)</u>
<u>Bleach Liquor (3)</u>	<u>Borax Solutions (3)</u>	<u>Boric Acid (4)</u>
<u>Brake Fluid (1)</u>	<u>Bromine Gas (3)</u>	<u>Bromobenzene (3)</u>
<u>Bunker Oil (4)</u>	<u>Butadiene Monomer (3)</u>	<u>Butane (3)</u>
<u>Butter (4)</u>	<u>Butyl Alcohol (4)</u>	<u>Butyl Carbitol (1)</u>
<u>Butyl Cellosolve (1)</u>	<u>Butyraldehyde (1)</u>	<u>Calcium Carbonate (4)</u>
<u>Calcium Chloride (4)</u>	<u>Calcium Hydroxide (3)</u>	<u>Calcium Hypochlorite (3)</u>
<u>Calcium Nitrate (4)</u>	<u>Calcium Sulfide (4)</u>	<u>Carbitol 2 (3)</u>
<u>Carbolic Acid (Phenol) (3)</u>	<u>Carbon Disulfide (3)</u>	<u>Carbon Monoxide (3)</u>
<u>Carbon Tetrachloride (2)</u>	<u>Carbonic Acid (4)</u>	<u>Castor Oil (4)</u>
<u>Cellosolve (1)</u>	<u>China Wood Oil, Tung Oil (3)</u>	<u>Chloracetic Acid (1)</u>
<u>Chlordane (3)</u>	<u>Chlorinated Solvents (4)</u>	<u>Chlorine Dioxide (3)</u>
<u>Chlorine Trifluoride (0)</u>	<u>Chlorine, Dry (4)</u>	<u>Chlorine, Wet (3)</u>
<u>Chloroform (0)</u>	<u>Chlorosulfonic Acid (1)</u>	<u>Chrome Plating Solution (3)</u>
<u>Chromic Acid (4)</u>	<u>Citric Acid (4)</u>	<u>Cod Liver Oil (4)</u>
<u>Coffee (4)</u>	<u>Coolanol Monsanto (3)</u>	<u>Corn Oil (4)</u>
<u>Creosote, Coal Tar (4)</u>	<u>Creosylic Acid (0)</u>	<u>Crude Oil (Asphalt Base) (3)</u>
<u>Cyclohexane (3)</u>	<u>Denatured Alcohol (4)</u>	<u>Diacetone (1)</u>



## Chemical Compatibility of Fluorosilicone

<u>Diacetone Alcohol (1)</u>	<u>Dibenzyl Ether (0)</u>	<u>Dibutyl Phthalate (2)</u>
<u>Dichloro-Butane (3)</u>	<u>Diesel Oil (4)</u>	<u>Di-ester Lubricant MIL-L-7808 (4)</u>
<u>Diethylamine (1)</u>	<u>Diethylamine Glycol (4)</u>	<u>Dimethyl Formamide (1)</u>
<u>Dimethyl Phthalate (3)</u>	<u>Dioxane (1)</u>	<u>Diphenyl (3)</u>
<u>Dow Corning 550 (3)</u>	<u>Dow Guard (4)</u>	<u>Dowtherm A (4)</u>
<u>Elco 28 Lubricant (4)</u>	<u>Epoxy Resins (0)</u>	<u>Ethane (3)</u>
<u>Ethanol (4)</u>	<u>Ethyl Acetoacetate (1)</u>	<u>Ethyl Alcohol (4)</u>
<u>Ethyl Benzene (4)</u>	<u>Ethyl Benzoate (4)</u>	<u>Ethyl Cellulose (1)</u>
<u>Ethyl Chloride (4)</u>	<u>Ethyl Chlorocarbonate (3)</u>	<u>Ethyl Diamine (1)</u>
<u>Ethyl Ether (1)</u>	<u>Ethyl Formate (4)</u>	<u>Ethyl Hexanol (4)</u>
<u>Ethyl Mercaptan (0)</u>	<u>Ethyl Oxalate (3)</u>	<u>Ethyl Pentachlorobenzene (3)</u>
<u>Ethyl Silicate (4)</u>	<u>Ethylene (4)</u>	<u>Ethylene Dichloride (1)</u>
<u>Ethylene Glycol (4)</u>	<u>Ethylene Oxide (1)</u>	<u>Ethylene Trichloride (2)</u>
<u>Formaldehyde (0)</u>	<u>Freon 11 (M) (3)</u>	<u>Freon 112 (0)</u>
<u>Freon 113 (1)</u>	<u>Freon 114 (3)</u>	<u>Freon 114B2 (0)</u>
<u>Freon 12 (0)</u>	<u>Freon 13 (1)</u>	<u>Freon 21 (0)</u>
<u>Freon 22 (0)</u>	<u>Freon 31 (0)</u>	<u>Freon 32 (0)</u>
<u>Freon 502 (F22+F316) (0)</u>	<u>Freon C318 (0)</u>	<u>FREON R134A (0)</u>
<u>Freon TF (1)</u>	<u>Fuel Oil (4)</u>	<u>Furan (0)</u>
<u>Furfural (1)</u>	<u>Furfuryl Alcohol (1)</u>	<u>Gallic Acid (4)</u>
<u>Gasoline, Automotive (4)</u>	<u>Gelatine (4)</u>	<u>Glucose (4)</u>
<u>Glycerin (4)</u>	<u>Glycol, General (4)</u>	<u>Grease, Petroleum Base (4)</u>
<u>Helium (4)</u>	<u>Heptane (4)</u>	<u>Hexane (4)</u>
<u>Hexyl Alcohol (3)</u>	<u>Hydraulic Oil, Petroleum Base (4)</u>	
<u>Hydrobromic Acid (4)</u>	<u>Hydrobromic Acid, Gas (1)</u>	<u>Hydrochloric Acid (0)</u>
<u>Hydrocyanic Acid (3)</u>	<u>Hydrofluoric Acid (1)</u>	<u>Hydrogen Gas (2)</u>
<u>Hydrogen Peroxide (3)</u>	<u>Hydroquinone (3)</u>	<u>Iodine (4)</u>
<u>Iso Octane (3)</u>	<u>Isobutyl Alcohol (3)</u>	<u>Isopropanol (3)</u>
<u>Isopropyl Acetate (1)</u>	<u>Isopropyl Chloride (3)</u>	<u>Isopropyl Ether (2)</u>
<u>JP 3 MIL-J5624 (3)</u>	<u>JP 4 MIL-J5624 (3)</u>	<u>JP 5 MIL-J5624 (3)</u>
<u>JP 6 MIL-J5624 (3)</u>	<u>Kerosene (4)</u>	<u>Lacquer Solvents (1)</u>
<u>Lacquers (1)</u>	<u>Lard, Animal Fat (4)</u>	<u>Lindol, Hydraulic Fluid (Phosphate Ester Type) (2)</u>
	<u>Linsed Oil (4)</u>	<u>Liquefied Petroleum Gas (LPG) (3)</u>
<u>Lubricating Oils, Petroleum Base (4)</u>	<u>Lye (3)</u>	<u>Malathion (3)</u>
<u>Maleic Acid (0)</u>	<u>Mercuric Chloride (4)</u>	<u>Mercury (0)</u>
<u>Methane (0)</u>	<u>Methanol (4)</u>	<u>Methyl Acetate (1)</u>

## Chemical Compatibility of Fluorosilicone

<u>Methyl Acrylate (1)</u>	<u>Methyl Alcohol (4)</u>	<u>Methyl Bromide (4)</u>
<u>Methyl Butyl Ketone (1)</u>	<u>Methyl Cellosolve (1)</u>	<u>Methyl Chloride (3)</u>
<u>Methyl Ether (4)</u>	<u>Methyl Ethyl Ketone (MEK) (1)</u>	<u>Methyl Isobutyl Ketone (MIBK) (1)</u>
<u>Methyl Mercaptan (0)</u>	<u>Methyl Methacrylate (1)</u>	<u>Methyl Oleate (3)</u>
<u>Methyl Propyl Salicylate (0)</u>	<u>Methylacrylic Acid (0)</u>	<u>Methylene Chloride (3)</u>
<u>MIL-F-25558 (RJ-1) (4)</u>	<u>MIL-F-25656 (3)</u>	<u>MIL-G-25760 (3)</u>
<u>MIL-H-5606 (4)</u>	<u>MIL-H-7083 (4)</u>	<u>MIL-J 5624, JP-3, JP-4, JP-5 (3)</u>
<u>Milk (4)</u>	<u>MIL-L-25681 (3)</u>	<u>MIL-R-25576 (RP-1) (4)</u>
<u>MIL-S-3136, Type 1 Fuel (4)</u>	<u>MIL-S-81087 (4)</u>	<u>Mineral Oils (4)</u>
<u>Monovinyl Acetate (4)</u>	<u>Naphtha (1)</u>	<u>Naphthalene (4)</u>
<u>Naphthalenic (4)</u>	<u>Natural Gas (0)</u>	<u>Neatsfoot Oil (4)</u>
<u>N-Hexaldehyde (1)</u>	<u>Nitric Acid (0)</u>	<u>Nitrobenzene (1)</u>
<u>Nitroethane (1)</u>	<u>Nitrogen Tetroxide (1)</u>	<u>Nitrogen, Gas (4)</u>
<u>Nitromethane (1)</u>	<u>Nitropropane (1)</u>	<u>N-Octane (3)</u>
<u>N-Pentane (2)</u>	<u>Octyl Alcohol (3)</u>	<u>Oleic Acid (4)</u>
<u>Oleum (Fuming Sulfuric Acid) (1)</u>	<u>Oronite 8200 (4)</u>	<u>Oxalic Acid (4)</u>
<u>Oxygen, 200-400F (0)</u>	<u>Oxygen, Cold (4)</u>	<u>Ozone (4)</u>
<u>Peanut Oil (4)</u>	<u>Petroleum Oil (4)</u>	<u>Phenol (3)</u>
<u>Phenylhydrazine (0)</u>	<u>Phosphoric Acid (2)</u>	<u>Phosphoric Trichloride (4)</u>
<u>Pine Oil (4)</u>	<u>Potassium Nitrate (4)</u>	<u>Potassium Sulfate (4)</u>
<u>Producer Gas (3)</u>	<u>Propane (3)</u>	<u>Propanol (4)</u>
<u>Propyl Acetate (1)</u>	<u>Propyl Alcohol (4)</u>	<u>Propylene (3)</u>
<u>Propylene Oxide (1)</u>	<u>Pydraul, 10E (1)</u>	<u>Pydraul, 230C, 312F, 540C (1)</u>
<u>Pydraul, 30E, 50E, 65E, 90E (4)</u>	<u>Pyranol, Transformer Oil (4)</u>	<u>Pyrogard 42, 43, 53, 55 (Phosphate Ester) (1)</u>
	<u>Rapeseed Oil (4)</u>	<u>Red Oil (4)</u>
<u>RJ-1 (MIL-F-25558) (4)</u>	<u>RP-1 (MIL-R-25576) (4)</u>	<u>Sea Water (4)</u>
<u>Silicone Grease (4)</u>	<u>Silicone Oils (4)</u>	<u>Silver Nitrate (4)</u>
<u>Skydrol 500 (0)</u>	<u>Sodium Bicarbonate (4)</u>	<u>Sodium Carbonate (4)</u>
<u>Sodium Chloride (4)</u>	<u>Sodium Hydroxide (0)</u>	<u>Soyabean Oil (4)</u>
<u>Steam to 350F (1)</u>	<u>Stearic Acid (2)</u>	<u>Stoddard Solvent (4)</u>
<u>Styrene Monomer (2)</u>	<u>Sucrose Solutions (2)</u>	<u>Sulfur Chloride (4)</u>
<u>Sulfur Dioxide Gas, Dry (3)</u>	<u>Sulfur Dioxide Gas, Wet (3)</u>	<u>Sulfur Dioxide, Liquefied Under Pressure (3)</u>
<u>Sulfur Hexafluoride (3)</u>	<u>Sulfur Trioxide (3)</u>	<u>Sulfuric Acid (Concentrated) (0)</u>
<u>Sulfurous Acid (0)</u>	<u>Tannic Acid (4)</u>	<u>Tartaric Acid (4)</u>
<u>Tertiary Butyl Alcohol (3)</u>	<u>Tertiary Butyl Mercaptan (0)</u>	<u>Tetrabromoethane (3)</u>
<u>Tetrabutyl Titanate (4)</u>	<u>Tetrachloroethane (0)</u>	<u>Tetrachloroethylene (3)</u>

## Chemical Compatibility of Fluorosilicone

<u>Tetraethyl Lead (0)</u>	<u>Tetrahydrofuran (1)</u>	<u>Tetralin (4)</u>
<u>Toluene (3)</u>	<u>Transmission Fluid, Type A (4)</u>	
<u>Turbine Oil (3)</u>	<u>Turpentine (3)</u>	<u>Varnish (3)</u>
<u>Vinegar (2)</u>	<u>VV-H-910 (3)</u>	<u>Wagner 21B Brake Fluid (1)</u>
<u>Water, Fresh (4)</u>	<u>Whiskey (4)</u>	<u>White Pine Tar (4)</u>
<u>Xylene (0)</u>		

## Chemical Compatibility of Nitrile (Buna-N)

<u>Acetaldehyde (1)</u>	<u>Acetamide (4)</u>	<u>Acetic Acid, Glacial (1)</u>
<u>Acetic Anhydride (4)</u>	<u>Acetone (1)</u>	<u>Acetophenone (1)</u>
<u>Acetyl Chloride (1)</u>	<u>Acetylene Gas (4)</u>	<u>Acrylonitrile (1)</u>
<u>Air below 200 C (4)</u>	<u>Alkazene (1)</u>	<u>Aluminium Acetate (3)</u>
<u>Aluminium Chloride (4)</u>	<u>Aluminium Flouride (4)</u>	<u>Aluminium Nitrate (4)</u>
<u>Aluminium Sulfate (4)</u>	<u>Ammonia, Anhydrous (3)</u>	<u>Ammonia, Gas, Cold (4)</u>
<u>Ammonia, Gas, Hot (3)</u>	<u>Ammonium Carbonate (3)</u>	<u>Ammonium Chloride (3)</u>
<u>Ammonium Hydroxide, Concentrated (2)</u>	<u>Ammonium Nitrate (4)</u>	<u>Ammonium Persulfate Solution (4)</u>
<u>Ammonium Phosphate (0)</u>	<u>Ammonium Sulfate (4)</u>	<u>Amyl Acetate (1)</u>
<u>Amyl Alcohol (3)</u>	<u>Amyl Borate (3)</u>	<u>Amyl Chloronaphthalene (2)</u>
<u>Aniline (1)</u>	<u>Aniline Oil (1)</u>	<u>Animal Oil (4)</u>
<u>Arachlor 1248 (2)</u>	<u>Argon (4)</u>	<u>Aromatic Fuel 50% (3)</u>
<u>Askarel Transformer Oil (3)</u>	<u>ASTM Fuel A (4)</u>	<u>ASTM Fuel B (2)</u>
<u>ASTM Fuel C (2)</u>	<u>ASTM Fuel D (2)</u>	<u>ASTM Oil Four (3)</u>
<u>ASTM Oil One (4)</u>	<u>ASTM Oil Three (4)</u>	<u>ASTM Oil Two (4)</u>
<u>Automatic Transmission Fluid (4)</u>	<u>Automotive Brake Fluid (0)</u>	<u>Beer (4)</u>
<u>Benzaldehyde (1)</u>	<u>Benzene (1)</u>	<u>Benzene Sulfonic Acid (1)</u>
<u>Benzine (Ligroin) (4)</u>	<u>Benzoic Acid (1)</u>	<u>Benzophenone (2)</u>
<u>Benzyl Alcohol (1)</u>	<u>Benzyl Benzoate (1)</u>	<u>Benzyl Chloride (1)</u>
<u>Bleach Liquor (2)</u>	<u>Borax Solutions (3)</u>	<u>Boric Acid (4)</u>
<u>Brake Fluid (1)</u>	<u>Bromine Gas (1)</u>	<u>Bromobenzene (1)</u>
<u>Bunker Oil (4)</u>	<u>Butadiene Monomer (2)</u>	<u>Butane (4)</u>
<u>Butter (4)</u>	<u>Butyl Alcohol (4)</u>	<u>Butyl Carbitol (1)</u>
<u>Butyl Cellosolve (2)</u>	<u>Butyraldehyde (1)</u>	<u>Calcium Carbonate (4)</u>
<u>Calcium Chloride (4)</u>	<u>Calcium Hydroxide (4)</u>	<u>Calcium Hypochlorite (2)</u>
<u>Calcium Nitrate (4)</u>	<u>Calcium Sulfide (4)</u>	<u>Carbitol 2 (3)</u>
<u>Carbolic Acid (Phenol) (1)</u>	<u>Carbon Disulfide (1)</u>	<u>Carbon Monoxide (4)</u>
<u>Carbon Tetrachloride (1)</u>	<u>Carbonic Acid (3)</u>	<u>Castor Oil (4)</u>
<u>Cellosolve (1)</u>	<u>China Wood Oil, Tung Oil (4)</u>	<u>Chloracetic Acid (1)</u>
<u>Chlordane (3)</u>	<u>Chlorinated Solvents (1)</u>	<u>Chlorine Dioxide (1)</u>
<u>Chlorine Trifluoride (1)</u>	<u>Chlorine, Dry (1)</u>	<u>Chlorine, Wet (1)</u>
<u>Chloroform (1)</u>	<u>Chlorosulfonic Acid (1)</u>	<u>Chrome Plating Solution (1)</u>
<u>Chromic Acid (1)</u>	<u>Citric Acid (4)</u>	<u>Cod Liver Oil (4)</u>
<u>Coffee (4)</u>	<u>Coolanol Monsanto (4)</u>	<u>Corn Oil (4)</u>
<u>Creosote, Coal Tar (3)</u>	<u>Creosylic Acid (1)</u>	<u>Crude Oil (Asphalt Base) (3)</u>

## Chemical Compatibility of Nitrile (Buna-N)

<u>Cyclohexane (4)</u>	<u>Denatured Alcohol (4)</u>	<u>Diacetone (1)</u>
<u>Diacetone Alcohol (1)</u>	<u>Dibenzyl Ether (1)</u>	<u>Dibutyl Phthalate (1)</u>
<u>Dichloro-Butane (3)</u>	<u>Diesel Oil (4)</u>	<u>Di-ester Lubricant MIL-L-7808 (3)</u>
<u>Diethylamine (2)</u>	<u>Diethylamine Glycol (4)</u>	<u>Dimethyl Formamide (2)</u>
<u>Dimethyl Phthalate (1)</u>	<u>Dioxane (1)</u>	<u>Diphenyl (1)</u>
<u>Dow Corning 550 (4)</u>	<u>Dow Guard (4)</u>	<u>Dowtherm A (1)</u>
<u>Elco 28 Lubricant (4)</u>	<u>Epoxy Resins (0)</u>	<u>Ethane (4)</u>
<u>Ethanol (4)</u>	<u>Ethyl Acetoacetate (3)</u>	<u>Ethyl Alcohol (4)</u>
<u>Ethyl Benzene (1)</u>	<u>Ethyl Benzoate (1)</u>	<u>Ethyl Cellulose (3)</u>
<u>Ethyl Chloride (4)</u>	<u>Ethyl Chlorocarbonate (1)</u>	<u>Ethyl Diamine (3)</u>
<u>Ethyl Ether (2)</u>	<u>Ethyl Formate (1)</u>	<u>Ethyl Hexanol (4)</u>
<u>Ethyl Mercaptan (1)</u>	<u>Ethyl Oxalate (1)</u>	<u>Ethyl Pentachlorobenzene (1)</u>
<u>Ethyl Silicate (4)</u>	<u>Ethylene (4)</u>	<u>Ethylene Dichloride (1)</u>
<u>Ethylene Glycol (4)</u>	<u>Ethylene Oxide (1)</u>	<u>Ethylene Trichloride (1)</u>
<u>Formaldehyde (4)</u>	<u>Freon 11 (M) (3)</u>	<u>Freon 112 (3)</u>
<u>Freon 113 (4)</u>	<u>Freon 114 (4)</u>	<u>Freon 114B2 (3)</u>
<u>Freon 12 (4)</u>	<u>Freon 13 (4)</u>	<u>Freon 21 (1)</u>
<u>Freon 22 (1)</u>	<u>Freon 31 (1)</u>	<u>Freon 32 (4)</u>
<u>Freon 502 (F22+F316) (3)</u>	<u>Freon C318 (4)</u>	<u>FREON R134A (0)</u>
<u>Freon TF (4)</u>	<u>Fuel Oil (4)</u>	<u>Furan (1)</u>
<u>Furfural (1)</u>	<u>Furfuryl Alcohol (1)</u>	<u>Gallic Acid (3)</u>
<u>Gasoline, Automotive (4)</u>	<u>Gelatine (4)</u>	<u>Glucose (4)</u>
<u>Glycerin (4)</u>	<u>Glycol, General (4)</u>	<u>Grease, Petroleum Base (4)</u>
<u>Helium (4)</u>	<u>Heptane (4)</u>	<u>Hexane (4)</u>
<u>Hexyl Alcohol (3)</u>	<u>Hydraulic Oil, Petroleum Base (4)</u>	
<u>Hydrobromic Acid (1)</u>	<u>Hydrobromic Acid, Gas (1)</u>	<u>Hydrochloric Acid (1)</u>
<u>Hydrocyanic Acid (3)</u>	<u>Hydrofluoric Acid (1)</u>	<u>Hydrogen Gas (4)</u>
<u>Hydrogen Peroxide (1)</u>	<u>Hydroquinone (1)</u>	<u>Iodine (3)</u>
<u>Iso Octane (4)</u>	<u>Isobutyl Alcohol (3)</u>	<u>Isopropanol (4)</u>
<u>Isopropyl Acetate (1)</u>	<u>Isopropyl Chloride (1)</u>	<u>Isopropyl Ether (3)</u>
<u>JP 3 MIL-J5624 (4)</u>	<u>JP 4 MIL-J5624 (4)</u>	<u>JP 5 MIL-J5624 (4)</u>
<u>JP 6 MIL-J5624 (4)</u>	<u>Kerosene (4)</u>	<u>Lacquer Solvents (1)</u>
<u>Lacquers (1)</u>	<u>Lard, Animal Fat (4)</u>	<u>Lindol, Hydraulic Fluid (Phosphate Ester Type) (1)</u>
<u>Linoleic Acid (3)</u>	<u>Linsed Oil (4)</u>	<u>Liquefied Petroleum Gas (LPG) (4)</u>
<u>Lubricating Oils, Petroleum Base (4)</u>	<u>Lye (1)</u>	<u>Malathion (3)</u>
<u>Maleic Acid (2)</u>	<u>Mercuric Chloride (4)</u>	<u>Mercury (4)</u>

## Chemical Compatibility of Nitrile (Buna-N)

<u>Methane (4)</u>	<u>Methanol (3)</u>	<u>Methyl Acetate (1)</u>
<u>Methyl Acrylate (1)</u>	<u>Methyl Alcohol (4)</u>	<u>Methyl Bromide (3)</u>
<u>Methyl Butyl Ketone (1)</u>	<u>Methyl Cellosolve (2)</u>	<u>Methyl Chloride (1)</u>
<u>Methyl Ether (4)</u>	<u>Methyl Ethyl Ketone (MEK) (1)</u>	<u>Methyl Isobutyl Ketone (MIBK) (1)</u>
<u>Methyl Mercaptan (0)</u>	<u>Methyl Methacrylate (1)</u>	<u>Methyl Oleate (1)</u>
<u>Methyl Propyl Salicylate (1)</u>	<u>Methylacrylic Acid (0)</u>	<u>Methylene Chloride (1)</u>
<u>MIL-F-25558 (RJ-1) (4)</u>	<u>MIL-F-25656 (4)</u>	<u>MIL-G-25760 (3)</u>
<u>MIL-H-5606 (4)</u>	<u>MIL-H-7083 (4)</u>	<u>MIL-J 5624, JP-3, JP-4, JP-5 (4)</u>
<u>Milk (4)</u>	<u>MIL-L-25681 (3)</u>	<u>MIL-R-25576 (RP-1) (4)</u>
<u>MIL-S-3136, Type 1 Fuel (4)</u>	<u>MIL-S-81087 (4)</u>	<u>Mineral Oils (4)</u>
<u>Monovinyl Acetate (1)</u>	<u>Naphtha (4)</u>	<u>Naphthalene (1)</u>
<u>Naphthalenic (3)</u>	<u>Natural Gas (4)</u>	<u>Neatsfoot Oil (4)</u>
<u>N-Hexaldehyde (1)</u>	<u>Nitric Acid (1)</u>	<u>Nitrobenzene (1)</u>
<u>Nitroethane (1)</u>	<u>Nitrogen Tetroxide (1)</u>	<u>Nitrogen, Gas (4)</u>
<u>Nitromethane (1)</u>	<u>Nitropropane (1)</u>	<u>N-Octane (3)</u>
<u>N-Pentane (4)</u>	<u>Octyl Alcohol (3)</u>	<u>Oleic Acid (4)</u>
<u>Oleum (Fuming Sulfuric Acid) (1)</u>	<u>Oronite 8200 (3)</u>	<u>Oxalic Acid (3)</u>
<u>Oxygen, 200-400F (1)</u>	<u>Oxygen, Cold (3)</u>	<u>Ozone (1)</u>
<u>Peanut Oil (4)</u>	<u>Petroleum Oil (4)</u>	<u>Phenol (0)</u>
<u>Phenylhydrazine (1)</u>	<u>Phosphoric Acid (1)</u>	<u>Phosphoric Trichloride (1)</u>
<u>Pine Oil (3)</u>	<u>Potassium Nitrate (4)</u>	<u>Potassium Sulfate (4)</u>
<u>Producer Gas (4)</u>	<u>Propane (4)</u>	<u>Propanol (4)</u>
<u>Propyl Acetate (1)</u>	<u>Propyl Alcohol (4)</u>	<u>Propylene (1)</u>
<u>Propylene Oxide (1)</u>	<u>Pydraul, 10E (1)</u>	<u>Pydraul, 230C, 312F, 540C (1)</u>
<u>Pydraul, 30E, 50E, 65E, 90E (1)</u>	<u>Pyranol, Transformer Oil (4)</u>	<u>Pyrogard 42, 43, 53, 55 (Phosphate Ester) (1)</u>
<u>Radiation (2)</u>	<u>Rapeseed Oil (3)</u>	<u>Red Oil (4)</u>
<u>RJ-1 (MIL-F-25558) (4)</u>	<u>RP-1 (MIL-R-25576) (4)</u>	<u>Sea Water (4)</u>
<u>Silicone Grease (4)</u>	<u>Silicone Oils (4)</u>	<u>Silver Nitrate (3)</u>
<u>Skydrol 500 (1)</u>	<u>Sodium Bicarbonate (4)</u>	<u>Sodium Carbonate (4)</u>
<u>Sodium Chloride (4)</u>	<u>Sodium Hydroxide (4)</u>	<u>Soyabean Oil (4)</u>
<u>Steam to 350F (1)</u>	<u>Stearic Acid (4)</u>	<u>Stoddard Solvent (4)</u>
<u>Styrene Monomer (3)</u>	<u>Sucrose Solutions (4)</u>	<u>Sulfur Chloride (1)</u>
<u>Sulfur Dioxide Gas, Dry (1)</u>	<u>Sulfur Dioxide Gas, Wet (1)</u>	<u>Sulfur Dioxide, Liquefied Under Pressure (1)</u>
<u>Sulfur Hexafluoride (3)</u>	<u>Sulfur Trioxide (1)</u>	<u>Sulfuric Acid (Concentrated) (1)</u>
<u>Sulfurous Acid (2)</u>	<u>Tannic Acid (4)</u>	<u>Tartaric Acid (4)</u>

## Chemical Compatibility of Nitrile (Buna-N)

<u>Tertiary Butyl Alcohol (3)</u>	<u>Tertiary Butyl Mercaptan (1)</u>	<u>Tetrabromoethane (1)</u>
<u>Tetrabutyl Titanate (3)</u>	<u>Tetrachloroethane (1)</u>	<u>Tetrachloroethylene (2)</u>
<u>Tetraethyl Lead (3)</u>	<u>Tetrahydrofuran (1)</u>	<u>Tetralin (1)</u>
<u>Toluene (2)</u>	<u>Transmission Fluid, Type A (4)</u>	
<u>Turbine Oil (3)</u>	<u>Turpentine (4)</u>	<u>Varnish (3)</u>
<u>Vinegar (3)</u>	<u>VV-H-910 (2)</u>	<u>Wagner 21B Brake Fluid (3)</u>
<u>Water, Fresh (4)</u>	<u>Whiskey (4)</u>	<u>White Pine Tar (3)</u>
<u>Xylene (1)</u>		

## Chemical Compatibility of Silicone

<u>Acetaldehyde (4)</u>	<u>Acetamide (2)</u>	<u>Acetic Acid, Glacial (4)</u>
<u>Acetic Anhydride (2)</u>	<u>Acetone (1)</u>	<u>Acetophenone (1)</u>
<u>Acetyl Chloride (2)</u>	<u>Acetylene Gas (2)</u>	<u>Acrylonitrile (1)</u>
<u>Air below 200 C (4)</u>	<u>Alkazene (1)</u>	<u>Aluminium Acetate (1)</u>
<u>Aluminium Chloride (3)</u>	<u>Aluminium Flouride (3)</u>	<u>Aluminium Nitrate (3)</u>
<u>Aluminium Sulfate (4)</u>	<u>Ammonia, Anhydrous (2)</u>	<u>Ammonia, Gas, Cold (4)</u>
<u>Ammonia, Gas, Hot (4)</u>	<u>Ammonium Carbonate (2)</u>	<u>Ammonium Chloride (2)</u>
<u>Ammonium Hydroxide, Concentrated (4)</u>	<u>Ammonium Nitrate (2)</u>	<u>Ammonium Persulfate Solution (1)</u>
<u>Ammonium Phosphate (3)</u>	<u>Ammonium Sulfate (4)</u>	<u>Amyl Acetate (1)</u>
<u>Amyl Alcohol (1)</u>	<u>Amyl Borate (1)</u>	<u>Amyl Chloronaphthalene (1)</u>
<u>Aniline (3)</u>	<u>Aniline Oil (1)</u>	<u>Animal Oil (0)</u>
<u>Arachlor 1248 (3)</u>	<u>Argon (3)</u>	<u>Aromatic Fuel 50% (1)</u>
<u>Askarel Transformer Oil (1)</u>	<u>ASTM Fuel A (1)</u>	<u>ASTM Fuel B (1)</u>
<u>ASTM Fuel C (1)</u>	<u>ASTM Fuel D (1)</u>	<u>ASTM Oil Four (1)</u>
<u>ASTM Oil One (4)</u>	<u>ASTM Oil Three (3)</u>	<u>ASTM Oil Two (0)</u>
<u>Automatic Transmission Fluid (1)</u>	<u>Automotive Brake Fluid (4)</u>	<u>Beer (4)</u>
<u>Benzaldehyde (1)</u>	<u>Benzene (1)</u>	<u>Benzene Sulfonic Acid (1)</u>
<u>Benzine (Ligroin) (1)</u>	<u>Benzoic Acid (0)</u>	<u>Benzophenone (1)</u>
<u>Benzyl Alcohol (0)</u>	<u>Benzyl Benzoate (0)</u>	<u>Benzyl Chloride (1)</u>
<u>Bleach Liquor (3)</u>	<u>Borax Solutions (3)</u>	<u>Boric Acid (4)</u>
<u>Brake Fluid (0)</u>	<u>Bromine Gas (1)</u>	<u>Bromobenzene (1)</u>
<u>Bunker Oil (0)</u>	<u>Butadiene Monomer (1)</u>	<u>Butane (1)</u>
<u>Butter (3)</u>	<u>Butyl Alcohol (3)</u>	<u>Butyl Carbitol (1)</u>
<u>Butyl Cellosolve (1)</u>	<u>Butyraldehyde (1)</u>	<u>Calcium Carbonate (0)</u>
<u>Calcium Chloride (4)</u>	<u>Calcium Hydroxide (4)</u>	<u>Calcium Hypochlorite (3)</u>
<u>Calcium Nitrate (3)</u>	<u>Calcium Sulfide (3)</u>	<u>Carbitol 2 (3)</u>
<u>Carbolic Acid (Phenol) (1)</u>	<u>Carbon Disulfide (1)</u>	<u>Carbon Monoxide (4)</u>
<u>Carbon Tetrachloride (1)</u>	<u>Carbonic Acid (4)</u>	<u>Castor Oil (4)</u>
<u>Cellosolve (1)</u>	<u>China Wood Oil, Tung Oil (1)</u>	<u>Chloracetic Acid (0)</u>
<u>Chlordane (1)</u>	<u>Chlorinated Solvents (1)</u>	<u>Chlorine Dioxide (2)</u>
<u>Chlorine Trifluoride (1)</u>	<u>Chlorine, Dry (1)</u>	<u>Chlorine, Wet (1)</u>
<u>Chloroform (1)</u>	<u>Chlorosulfonic Acid (1)</u>	<u>Chrome Plating Solution (3)</u>
<u>Chromic Acid (4)</u>	<u>Citric Acid (4)</u>	<u>Cod Liver Oil (3)</u>
<u>Coffee (4)</u>	<u>Coolanol Monsanto (1)</u>	<u>Corn Oil (4)</u>
<u>Creosote, Coal Tar (1)</u>	<u>Creosylic Acid (0)</u>	<u>Crude Oil (Asphalt Base) (1)</u>
<u>Cyclohexane (1)</u>	<u>Denatured Alcohol (4)</u>	<u>Diacetone (1)</u>



## Chemical Compatibility of Silicone

<u>Diacetone Alcohol (0)</u>	<u>Dibenzyl Ether (0)</u>	<u>Dibutyl Phthalate (3)</u>
<u>Dichloro-Butane (1)</u>	<u>Diesel Oil (1)</u>	<u>Di-ester Lubricant MIL-L-7808 (1)</u>
<u>Diethylamine (3)</u>	<u>Diethylamine Glycol (3)</u>	<u>Dimethyl Formamide (2)</u>
<u>Dimethyl Phthalate (0)</u>	<u>Dioxane (1)</u>	<u>Diphenyl (1)</u>
<u>Dow Corning 550 (2)</u>	<u>Dow Guard (4)</u>	<u>Dowtherm A (4)</u>
<u>Elco 28 Lubricant (3)</u>	<u>Epoxy Resins (0)</u>	<u>Ethane (1)</u>
<u>Ethanol (3)</u>	<u>Ethyl Acetoacetate (2)</u>	<u>Ethyl Alcohol (3)</u>
<u>Ethyl Benzene (1)</u>	<u>Ethyl Benzoate (1)</u>	<u>Ethyl Cellulose (2)</u>
<u>Ethyl Chloride (1)</u>	<u>Ethyl Chlorocarbonate (1)</u>	<u>Ethyl Diamine (4)</u>
<u>Ethyl Ether (1)</u>	<u>Ethyl Formate (0)</u>	<u>Ethyl Hexanol (3)</u>
<u>Ethyl Mercaptan (2)</u>	<u>Ethyl Oxalate (1)</u>	<u>Ethyl Pentachlorobenzene (1)</u>
<u>Ethyl Silicate (0)</u>	<u>Ethylene (0)</u>	<u>Ethylene Dichloride (1)</u>
<u>Ethylene Glycol (4)</u>	<u>Ethylene Oxide (1)</u>	<u>Ethylene Trichloride (1)</u>
<u>Formaldehyde (0)</u>	<u>Freon 11 (M) (1)</u>	<u>Freon 112 (1)</u>
<u>Freon 113 (1)</u>	<u>Freon 114 (1)</u>	<u>Freon 114B2 (1)</u>
<u>Freon 12 (0)</u>	<u>Freon 13 (1)</u>	<u>Freon 21 (1)</u>
<u>Freon 22 (1)</u>	<u>Freon 31 (0)</u>	<u>Freon 32 (0)</u>
<u>Freon 502 (F22+F316) (0)</u>	<u>Freon C318 (0)</u>	<u>FREON R134A (0)</u>
<u>Freon TF (1)</u>	<u>Fuel Oil (1)</u>	<u>Furan (1)</u>
<u>Furfural (0)</u>	<u>Furfuryl Alcohol (1)</u>	<u>Gallic Acid (0)</u>
<u>Gasoline, Automotive (1)</u>	<u>Gelatine (4)</u>	<u>Glucose (4)</u>
<u>Glycerin (4)</u>	<u>Glycol, General (4)</u>	<u>Grease, Petroleum Base (1)</u>
<u>Helium (4)</u>	<u>Heptane (1)</u>	<u>Hexane (1)</u>
<u>Hexyl Alcohol (3)</u>	<u>Hydraulic Oil, Petroleum Base (2)</u>	
<u>Hydrobromic Acid (0)</u>	<u>Hydrobromic Acid, Gas (1)</u>	<u>Hydrochloric Acid (0)</u>
<u>Hydrocyanic Acid (0)</u>	<u>Hydrofluoric Acid (0)</u>	<u>Hydrogen Gas (2)</u>
<u>Hydrogen Peroxide (1)</u>	<u>Hydroquinone (0)</u>	<u>Iodine (2)</u>
<u>Iso Octane (1)</u>	<u>Isobutyl Alcohol (4)</u>	<u>Isopropanol (4)</u>
<u>Isopropyl Acetate (1)</u>	<u>Isopropyl Chloride (1)</u>	<u>Isopropyl Ether (1)</u>
<u>JP 3 MIL-J5624 (1)</u>	<u>JP 4 MIL-J5624 (1)</u>	<u>JP 5 MIL-J5624 (1)</u>
<u>JP 6 MIL-J5624 (1)</u>	<u>Kerosene (1)</u>	<u>Lacquer Solvents (1)</u>
<u>Lacquers (1)</u>	<u>Lard, Animal Fat (3)</u>	<u>Lindol, Hydraulic Fluid (Phosphate Ester Type) (2)</u>
	<u>Linsed Oil (4)</u>	<u>Liquefied Petroleum Gas (LPG) (1)</u>
<u>Lubricating Oils, Petroleum Base (0)</u>	<u>Lye (4)</u>	<u>Malathion (1)</u>
<u>Maleic Acid (1)</u>	<u>Mercuric Chloride (4)</u>	<u>Mercury (4)</u>
<u>Methane (0)</u>	<u>Methanol (4)</u>	<u>Methyl Acetate (1)</u>

## Chemical Compatibility of Silicone

<u>Methyl Acrylate (1)</u>	<u>Methyl Alcohol (4)</u>	<u>Methyl Bromide (0)</u>
<u>Methyl Butyl Ketone (1)</u>	<u>Methyl Cellosolve (1)</u>	<u>Methyl Chloride (1)</u>
<u>Methyl Ether (4)</u>	<u>Methyl Ethyl Ketone (MEK) (1)</u>	<u>Methyl Isobutyl Ketone (MIBK) (1)</u>
<u>Methyl Mercaptan (0)</u>	<u>Methyl Methacrylate (1)</u>	<u>Methyl Oleate (0)</u>
<u>Methyl Propyl Salicylate (0)</u>	<u>Methylacrylic Acid (0)</u>	<u>Methylene Chloride (1)</u>
<u>MIL-F-25558 (RJ-1) (1)</u>	<u>MIL-F-25656 (1)</u>	<u>MIL-G-25760 (1)</u>
<u>MIL-H-5606 (1)</u>	<u>MIL-H-7083 (4)</u>	<u>MIL-J 5624, JP-3, JP-4, JP-5 (1)</u>
<u>Milk (4)</u>	<u>MIL-L-25681 (1)</u>	<u>MIL-R-25576 (RP-1) (1)</u>
<u>MIL-S-3136, Type 1 Fuel (1)</u>	<u>MIL-S-81087 (2)</u>	<u>Mineral Oils (3)</u>
<u>Monovinyl Acetate (1)</u>	<u>Naphtha (1)</u>	<u>Naphthalene (1)</u>
<u>Naphthalenic (1)</u>	<u>Natural Gas (0)</u>	<u>Neatsfoot Oil (3)</u>
<u>N-Hexaldehyde (3)</u>	<u>Nitric Acid (0)</u>	<u>Nitrobenzene (1)</u>
<u>Nitroethane (1)</u>	<u>Nitrogen Tetroxide (1)</u>	<u>Nitrogen, Gas (4)</u>
<u>Nitromethane (1)</u>	<u>Nitropropane (1)</u>	<u>N-Octane (1)</u>
<u>N-Pentane (1)</u>	<u>Octyl Alcohol (3)</u>	<u>Oleic Acid (1)</u>
<u>Oleum (Fuming Sulfuric Acid) (1)</u>	<u>Oronite 8200 (1)</u>	<u>Oxalic Acid (3)</u>
<u>Oxygen, 200-400F (0)</u>	<u>Oxygen, Cold (4)</u>	<u>Ozone (4)</u>
<u>Peanut Oil (4)</u>	<u>Petroleum Oil (1)</u>	<u>Phenol (1)</u>
<u>Phenylhydrazine (0)</u>	<u>Phosphoric Acid (1)</u>	<u>Phosphoric Trichloride (0)</u>
<u>Pine Oil (1)</u>	<u>Potassium Nitrate (4)</u>	<u>Potassium Sulfate (4)</u>
<u>Producer Gas (3)</u>	<u>Propane (1)</u>	<u>Propanol (4)</u>
<u>Propyl Acetate (1)</u>	<u>Propyl Alcohol (4)</u>	<u>Propylene (1)</u>
<u>Propylene Oxide (1)</u>	<u>Pydraul, 10E (1)</u>	<u>Pydraul, 230C, 312F, 540C (1)</u>
<u>Pydraul, 30E, 50E, 65E, 90E (4)</u>	<u>Pyranol, Transformer Oil (1)</u>	<u>Pyrogard 42, 43, 53, 55 (Phosphate Ester) (1)</u>
<u>Radiation (3)</u>	<u>Rapeseed Oil (1)</u>	<u>Red Oil (1)</u>
<u>RJ-1 (MIL-F-25558) (1)</u>	<u>RP-1 (MIL-R-25576) (1)</u>	<u>Sea Water (4)</u>
<u>Silicone Grease (2)</u>	<u>Silicone Oils (1)</u>	<u>Silver Nitrate (4)</u>
<u>Skydrol 500 (2)</u>	<u>Sodium Bicarbonate (4)</u>	<u>Sodium Carbonate (4)</u>
<u>Sodium Chloride (4)</u>	<u>Sodium Hydroxide (0)</u>	<u>Soyabean Oil (4)</u>
<u>Steam to 350F (1)</u>	<u>Stearic Acid (3)</u>	<u>Stoddard Solvent (1)</u>
<u>Styrene Monomer (1)</u>	<u>Sucrose Solutions (4)</u>	<u>Sulfur Chloride (2)</u>
<u>Sulfur Dioxide Gas, Dry (3)</u>	<u>Sulfur Dioxide Gas, Wet (3)</u>	<u>Sulfur Dioxide, Liquefied Under Pressure (3)</u>
<u>Sulfur Hexafluoride (3)</u>	<u>Sulfur Trioxide (3)</u>	<u>Sulfuric Acid (Concentrated) (0)</u>
<u>Sulfurous Acid (1)</u>	<u>Tannic Acid (3)</u>	<u>Tartaric Acid (4)</u>
<u>Tertiary Butyl Alcohol (3)</u>	<u>Tertiary Butyl Mercaptan (1)</u>	<u>Tetrabromoethane (1)</u>

## Chemical Compatibility of Silicone

<u>Tetrabutyl Titanate (0)</u>	<u>Tetrachloroethane (1)</u>	<u>Tetrachloroethylene (0)</u>
<u>Tetraethyl Lead (0)</u>	<u>Tetrahydrofuran (1)</u>	<u>Tetralin (1)</u>
<u>Toluene (1)</u>	<u>Transmission Fluid, Type A (3)</u>	
<u>Turbine Oil (1)</u>	<u>Turpentine (1)</u>	<u>Varnish (1)</u>
<u>Vinegar (4)</u>	<u>VV-H-910 (0)</u>	<u>Wagner 21B Brake Fluid (2)</u>
<u>Water, Fresh (3)</u>	<u>Whiskey (4)</u>	<u>White Pine Tar (1)</u>
<u>Xylene (1)</u>		