

CHEMICAL GUIDE

MATERIALS COMPATIBILITY



VERSAMATIC®
PUMPING MADE EASY

VERSAMATIC.COM



VERSAMATIC® Materials Compatibility Guide

This publication is intended as a general guide for **pump material selection**. It includes many common liquids used in chemical, paint, industrial and food processing applications.

This chart has been compiled using many sources, all believed to be reliable. However, the information accuracy of these ratings cannot be guaranteed. Due to the extensive scope of this field, the tabulation is not complete, nor is it conclusive.

Corrosion is the destructive attack of metals by chemical or electrochemical reaction with its environment. Corrosion rates vary widely with concentration, temperature and the presence of abrasives. Impurities or other trace elements common in industrial liquids may inhibit or accelerate corrosion. Aeration or deaeration of the substance being pumped can also affect the rate of corrosion. Materials used in the pump and pumping systems must be chemically compatible.

Halogenated Solvents Warning

The corrosive action of halogenated solvents which come in contact with aluminum or galvanized wetted parts can, in certain situations, cause an explosion. Solvent manufacturers typically add inhibitors to prevent this corrosive action, but there is no guarantee that the inhibitors will work in all circumstances. This is especially true of reclaimed or used solvents in which the inhibitors are degraded. Versa-Matic® advises that stainless steel or PVDF pumps be used to pump halogenated solvents.

Consult your material supplier for compatibility with aluminum.

Typical examples of halogenated hydrocarbon solvents include, but are not limited to:

Carbon Tetrachloride	Methylene Chloride
Chloroform	Trichloroethane
Dichlorethylene	Trichloroethylene
Methyl Chloride	

Elastomers are subject to destructive attack by chemicals or solvents. Attack may be evident as hardening, swelling, loss of elasticity, increased permeability, or more subtle changes.

CAUTION: Plastic pumps and components are not UV stabilized. Ultraviolet radiation can damage these parts and negatively affect material properties. Do not expose to UV light for extended periods of time.

In general, destructive reaction on all materials of construction increases as temperatures increase. Temperature limitations are listed below.

Elastomer Material Color Code

NITRILE	Black w/ Red Dot
FDA HYTREL®	Cream
NEOPRENE	Black w/ Green Dot
E.P.D.M.....	Black w/ Blue Dot
PTFE	White
POLYURETHANE	Pale Yellow
PFA.....	White
FLUOROCARBON (VT)	Black w/ Silver Dot
XL TPE (Santoprene®).....	Tan or Bright Yellow
XL TPE (FDA Santoprene®).....	Tan

These colors are used for Versa-Matic® manufactured elastomer products. The color codes of products made by other manufacturers may differ from those made by Versa-Matic.

Temperature Limits

NEOPRENE	-10°F (-23°C) to +200°F (+93°C)
NITRILE	-10°F (-23°C) to +190°F (+88°C)
EPDM	-40°F (-40°C) to +280°F (+138°C)
(FKM) FLUOROCARBON	-40°F (-40°C) to +350°F (+177°C)
PTFE	-35°F (-37°C) to +220°F (+104°C)
POLYURETHANE	+32°F (0°C) to +150°F (+66°C)
SANTOPRENE® (XL TPE)	-40°F (-40°C) to +275°F (+135°C)
PFA	-20°F (-29°C) to +300°F (+149°C)
FDA HYTREL	-20°F (-29°C) to +220°F (+104°C)

METALLIC PUMPS can operate above 212°F (100°C). However, if you are operating above these limits, consult the factory for assistance.

NON-METALLIC PUMPS can operate to the following temperature limits:

- ACETAL -20°F (-29°C) to +190°F (88°C)
- POLYPROPYLENE +32°F (0°C) to +180°F (82°C)
- PVDF 0°F (-18°C) to +250°F (121°C)

NOTE: These are average temperatures. Chemicals and solvents can have an effect on temperature limit.

Materials of Construction, Temperature Limits & Compatibility

Materials of Construction — Pumps							
MODEL	Acetal®	Aluminum	Cast Iron	Hastelloy C	Polypropylene	PVDF	Stainless Steel
E6 (1/4")	■				■	■	
E8 (3/8")					●	●	
E5 (1/2")	●	●		●	●▲	●▲	●
E7 (3/4")		●					
E1 (1")		●		●	●▲	●▲	●
E4 (1-1/4" – 1-1/2")		■	■	●■	●	●	●■
E40 (1-1/2")		●	●				●
E2 (2")		●■	●■	●■	●	●	●■▲▼
E2-FV (2")		■					
E3 (3")		●■	■	●■	●	●	●■

● Bolted Construction ■ Clamped Construction ▲ Split Manifold Model Available ▼ High Pressure Model Available

Diaphragms, Valve Balls, Valve Seats & Valve Seat O-rings															
	Aluminum	Nitrile	PVDF	Neoprene	EPDM	Polypropylene	Polyurethane	316 Stainless Steel	PTFE			Encapsulated Silicone	Thermoplastics		(FKM) Fluorocarbon
									2-Piece	Vers-a-Tuff™	FUSION™		Santoprene® (TPE XL)	FDA Hytrel®	
ELASTOMERS															
DIAPHRAGMS		✓		✓	✓				✓	✓	✓		✓	✓	✓
VALVE BALLS		✓		✓	✓			✓	✓				✓	✓	✓
VALVE SEATS	✓	✓	✓	✓	✓	✓	✓	✓	✓				✓	✓	✓
VALVE SEAT O-RINGS		✓		✓	✓							✓	✓		✓

CHEMICAL FORMULA	ELASTOMERS							METAL PARTS				PLASTICS		
	Neoprene	Nitrile	E.P.D.M.	Hytrel	(FKM) Fluorocarbon	PTFE, PFA	Santoprene	Aluminum	Cast Iron / Steel	Stainless Steel	Alloy C (Hastelloy Equiv)	Polypropylene	Acetal	PVDF
1-Nitropropane CH3(CH2)2NO2	C	X	A	ND	X	A	ND	A	A	A	A	ND	ND	ND
Acetaldehyde (Ethanal) CH3CHO	X	X	A	B	X	A	B	A	B	A	A	C	A	A ^{150°}
Acetamide (Acetic Acid Amide) CH3CONH2	B	B	A	ND	B	A	A	A	X	X	A	A	ND	A ^{140°}
Acetate Solvents CH3COOR	X	X	ND	ND	X	A	B	A	ND	A	ND	X	A	A
Acetic Acid — 20%	B	C	A	A	C	A	B	ND	A	A	C	B	A	B
Acetic Acid — 30%	B	C	A	A	X	A	B	X	A	A	C	B	B	B
Acetic Acid — 50% CH3COOH	C	C	A	ND	C	A	B	X	A	A	C	B	B	B
Acetic Acid — Glacial CH3COOH	X	C	B	A	X	A	B	B	X	A	A	C	B	A ^{120°}
Acetic Anhydride (Acetic Oxide) (CH3CO)2O	B	C	B	C	X	A	A	B	90%B ^{212°}	A	A	X	X	B ^{70°}
Acetone (Dimethylketone) CH3COCH3	X	X	A	C	X	A	B	B	A	A	A	X	B ^{120°}	X
Acetone Cyanohydrin (CH3)2C(OH)CN	B	X	X	ND	X	A	A	B	B	B	ND	ND	ND	ND
Acetonitrile (Methyl Cyanide) CH3CN	A	C	A	ND	X	A	A	A	A	A	B ^{100°}	ND	A	A
Acetophenone (Phenyl Methyl Ketone) C6H5COCH3	X	X	A	ND	X	A	B	B	A	A	B	A ^{70°}	ND	A
Acetyl Acetone (2,4-Pentanedione) CH3COCH2COCH3	X	X	A	ND	X	A	B	X	B	B	ND	ND	ND	ND
Acetyl Chloride CH3COCl	X	X	C	X	B	A	B	X	A	B	A	X	ND	A
Acetyl Salicylic Acid (Aspirin) (CH3OCO) • C6H4COOH	X	ND	B	ND	ND	A	A	X	B	B	ND	ND	ND	ND
Acetylene (Ethyne) HC ° CH	C	A	A	A	A	A	C	A	A	A	A	X	A	A
Acetylene Tetrabromide (Tetra Bromoethane) (CHBr2)2	X	X	ND	ND	A	A	X	X	A	ND	ND	ND	ND	ND
Acrolein (Acrylaldehyde) H2C = CHCHO	ND	B	ND	ND	A	A	A	B	B	B	ND	ND	ND	ND
Acrylonitrile (Vinyl Cyanide) CH2=CHCN	X	X	X	ND	X	A	B	C	A	A	A	B	ND	A
Adipic Acid (1,4-Butanedicarboxylic Acid)	X	B	ND	ND	A	A	B	B	B	B	A	A	ND	A
Alkazene® (Chlorethyl or Polyisopropyl benzenes)	X	X	ND	ND	A	A	X	ND	ND	ND	ND	ND	ND	ND

Data limited to % concentration and/or temperature °F shown. Where not shown temperature is 70°F (21°C) Ambient.
RATING KEY: (A) Excellent (B) Good (C) Fair to Poor (X) Not Recommended (ND) No Data Available

CHEMICAL FORMULA	ELASTOMERS							METAL PARTS				PLASTICS		
	Neoprene	Nitrile	E.P.D.M.	Hytrel	(FKM) Fluorocarbon	PTFE, PFA	Santoprene	Aluminum	Cast Iron / Steel	Stainless Steel	Alloy C (Hastelloy Equiv)	Polypropylene	Acetal	PVDF
Allyl Alcohol (2-Propen-1-ol) CH2CHCH2OH	A	A	A	ND	B	A	B	A	A	A	ND	ND	ND	A
Allyl Bromide (3-Bromopropene) H2C=CHCH2Br	X	X	X	ND	B	A	ND	X	A	ND	ND	ND	ND	ND
Allyl Chloride (3-Chloropropene) CH2=CHCH2Cl	X	X	X	ND	B	A	ND	X	C	B	ND	A ^{70°}	ND	A
Almond Oil (Artificial) (Alum) (Aluminum Potassium)	X	X	B	ND	X	A	ND	ND	ND	ND	ND	ND	ND	ND
Aluminum Acetate (Burow's Solution)	C	C	A	ND	X	A	A	ND	B	C	A	A	A ^{100°}	ND
Aluminum Bromide AlBr3	A	A	ND	ND	ND	A	ND	ND	ND	ND	ND	ND	ND	A
Aluminum Chloride AlCl3	A	A	A	B	A	A	20%A	X	C	B	25%A	A	B	A
Aluminum Fluoride AlF3	A	A	B	ND	A	A	A	50%A	C	C	20%A	A	X	A
Aluminum Hydroxide (Alumina Trihydrate) Al(OH)3	A	B	A	ND	C	A	A	10%B	30%B	B	10%B	A	ND	A
Aluminum Nitrate Al(NO3)3 • 9H2O	A	A	A	ND	A	A	A	X	ND	0%A	0%B	A	ND	A
Aluminum Phosphate AlPO4	A	A	A	ND	A	A	A	ND	ND	ND	ND	ND	ND	ND
Aluminum Potassium Sulfate (Potash Alum) KAl(SO4)2	A	A	A	ND	A	A	A	10%A	X	A	B	A	A	A
Aluminum Sodium Sulfate (Soda Alum) NaAl(SO4)2	A	A	A	ND	A	A	ND	ND	ND	ND	ND	ND	ND	ND
Aluminum Sulfate (Cake Alum) Al2(SO4)3	A	A	A	B	A	A	A	30%B	X	50%A ^{167°}	90%A ^{212°}	A	B	A
Amines R-NH2	B	X	ND	A ^{70°}	X	ND	A	A	ND	A	ND	B	C	ND
Ammonia Anhydrous, Liquid NH3	B	B	A	X	X	A	A	A	A	A	A	A	X	A
Ammonia Gas — Cold	A	A	ND	ND	A	A	A	ND	ND	ND	ND	ND	ND	ND
Ammonia Gas — Hot	B	C	ND	ND	X	A	A	ND	ND	ND	ND	ND	ND	ND
Ammonia Liquors	A	ND	ND	ND	X	A	A	A	A	A	ND	ND	ND	ND
Ammonium Acetate CH3CO2NH4	A	ND	ND	ND	A	A	A	50%B	50%A	ND	ND	ND	ND	ND
Ammonium Bicarbonate NH4HCO3	A	A	A	ND	A	A	B	B	90%B	ND	ND	ND	ND	ND
Ammonium Bifluoride — 10% NH4HF2	X	B	ND	ND	ND	A	A	C	X	B	B	A	ND	A
Ammonium Carbonate (NH4)2CO3	B	X	A	ND	A	A	A	B	B	70%B ^{212°}	70%B ^{212°}	A	ND	A

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Chemical Formula	Elastomers							Metal Parts				Plastics		
	Neoprene	Nitrile	E.P.D.M.	Hytel	(FKM) Fluorocarbon	PTFE, PFA	Santoprene	Aluminum	Cast Iron / Steel	Stainless Steel	Alloy C (Hastelloy Equiv)	Polypropylene	Acetal	PVDF
Ammonium Casenite	A	ND	ND	ND	ND	ND	A	ND	ND	A	ND	ND	ND	ND
Ammonium Chloride (Sal Ammoniac) NH4Cl	A	A	A	A	A	A	A	X	X	B	A	A	X	A
Ammonium Cupric Sulfate (NH4)2Cu(SO4)2	ND	A	ND	ND	A	A	ND	ND	ND	ND	ND	ND	ND	ND
Ammonium Dichromate (NH4)2Cr2O7	A	A	A	ND	ND	A	A	A	30%A	ND	ND	ND	ND	ND
Ammonium Fluoride NH4F	B	B	ND	ND	20%A	A	ND	10%B	20%B	B	40%A	B	ND	A
Ammonium Hydroxide (Aqua Ammonia) NH4OH	B	B	A	ND	B	A	A	30%A	30%B	50%A	80%A	A	B	A
Ammonium Metaphosphate	A	A	A	ND	A	A	ND	90%B	B	B	A	A	ND	A
Ammonium Nitrate NH4NO3	B	A	A	B	A	A	A	B	B	A	A	A	B	A
Ammonium Nitrite NH4NO2	A	A	ND	ND	ND	A	A	ND	ND	ND	ND	70%A	ND	A
Ammonium Oxalate (NH4OOC)2	A	A	ND	ND	ND	ND	A	ND	ND	A	A	ND	ND	ND
Ammonium Persulfate (NH4)2S2O8	A	C	B	ND	A	A	A	C	X	A	ND	A	ND	A
Ammonium Phosphate, Monobasic (NH4)H2PO4	A	A	A	B	A	A	A	X	X	B	5%A	A	ND	A
Ammonium Phosphate, Di-Basic (NH4)2HPO4	A	A	ND	ND	A	A	A	B	ND	A	A	A	B	A
Ammonium Phosphate, Tri-Basic (NH4)3PO4•3H2O	A	A	ND	ND	A	A	A	X	ND	B	B	A	ND	A
Ammonium Sulfate (NH4)2SO4	A	A	A	C	A	A	A	X	B	80%A ^{212°}	40%B	A	B	A
Ammonium Sulfide (NH4)2S	A	A	ND	ND	A	A	ND	B	ND	B	10%A	ND	ND	ND
Ammonium Sulfite (NH4)2SO3•H2O	ND	A	ND	ND	A	A	ND	C	X	B	A ^{212°}	A	X	ND
Ammonium Thiocyanate NH4SCN	A	A	A	ND	A	A	ND	C	C	50%A	50%A	ND	ND	ND
Ammonium Thiosulfate (NH4)2S2O3	A	A	A	ND	A	A	A	40%A	X	10%A	ND	ND	ND	ND
Amyl Acetate (Banana Oil) CH3CO2C5H11	X	X	A	C	X	A	B	A	B	A	B	X	X	A ^{120°}
Amyl Alcohol (Pentyl Alcohol) C5H11OH	A	B	A	A	A	A	A	A	C	A	A	B	A	A
Amyl Borate C5H11BO3	B	A	ND	ND	A	A	B	ND	ND	ND	ND	ND	ND	ND
Amyl Chloride (Chloropentane) CH3(CH2)4Cl	X	X	X	ND	A	A	C	X	A	A	B	X	A	A
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	Neoprene	Nitrile	E.P.D.M.	Hytel	(FKM) Fluorocarbon	PTFE, PFA	Santoprene	Aluminum	Cast Iron / Steel	Stainless Steel	Alloy C (Hastelloy Equiv)	Polypropylene	Acetal	PVDF
Amyl Chloronaphthalene	X	B	ND	ND	A	A	C	ND	ND	ND	ND	ND	ND	ND
Amyl Naphthalene C15H18	X	X	X	ND	A	A	C	ND	ND	ND	ND	ND	ND	ND
Amyl Phenol C6H4(OH)C5H11	ND	X	ND	ND	A	A	ND	A	A	A	A	ND	ND	ND
Aniline (Aniline Oil) (Amino Benzene) C6H5NH2	X	X	C	X	B	A	B	B	A	A	B	A	A	A
Aniline Dyes	C	C	C	ND	B	A	B	B	C	B	ND	ND	ND	ND
Aniline Hydrochloride C6H5NH2•HCl	X	C	ND	ND	B	A	A	X	X	X	ND	X	ND	A
Animal Fats & Oils	C	A	B	B	A	A	C	A	X	A	A	ND	ND	A
Animal Gelatin	A	A	A	ND	A	A	ND	ND	ND	A	ND	ND	ND	ND
Anisole (Methylphenyl Ether) C6H5OCH3	X	ND	ND	ND	X	A	ND	B	B	B	B	ND	ND	ND
Ansul Ether	X	C	ND	ND	X	A	X	ND	ND	ND	ND	ND	ND	ND
Anthraquinone C14H8O2	ND	ND	ND	ND	ND	A	ND	B	B	B	A	ND	ND	ND
Anti-Freeze (Alcohol Base)	A	A	A	ND	A	A	ND	A	A	A	A	ND	ND	ND
Anti-Freeze (Glycol Base) (Prestone® Etc.)	B	A	A	ND	A	A	A	A	A	A	A	ND	ND	ND
Antimony Pentachloride SbCl5	ND	X	ND	ND	ND	A	ND	A	A	A	A	ND	ND	ND
Antimony Trichloride SbCl3	ND	B	A	ND	A	A	ND	B	A	A	B	A	ND	A
Aqua Regia (Nitric & Hydrochloric Acid)	X	X	X	ND	B	A	X	X	X	X	C	C	X	A
Aroclor® PCB mixtures	X	C	X	ND	A	A	ND	A	B	A	90%A	X	ND	ND
Aromatic Hydrocarbons C6H5R	X	X	ND	C	A	A	C	A	A	A	ND	ND	ND	ND
Aromatic Solvents (Benzene Etc.)	X	C	X	ND	B	A	ND	A	B	A	B	ND	ND	ND
Arsenic Acid AsH3O4	A	B	A	ND	A	A	A	A	X	B	B	A	ND	A
Arsenic Trichloride (Arsenic Butter) AsCl3	A	C	X	ND	X	A	B	B	B	X	B	ND	ND	ND
Ascorbic Acid C6H8O6	ND	ND	ND	ND	A	A	ND	A	X	A	ND	ND	ND	ND
Askarel® (Pyranol®) PCB mixtures	X	B	X	ND	C	A	X	ND	ND	A	ND	ND	ND	ND
Asphalt Hydrocarbons	C	B	X	B	A	A	B	A	B	A	ND	A	B	A
Asphalt Topping Hydrocarbons	A	C	ND	B	C	A	ND	ND	A	A	ND	ND	ND	ND
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	Neoprene	Nitrile	E.P.D.M.	Hytel	(FKM) Fluorocarbon	PTFE, PFA	Santoprene	Aluminum	Cast Iron / Steel	Stainless Steel	Alloy C (Hastelloy Equiv)	Polypropylene	Acetal	PVDF
ASTM — Ref #1 Oil (High Aniline) (Hydrocarbons)	B	A	X	A	A	A	A	A	A	A	A	ND	ND	ND
ASTM — Ref #2 Oil (Medium Aniline) (Hydrocarbons)	B	A	X	A	A	A	A	A	A	A	A	ND	ND	ND
ASTM — Ref #3 Oil (Low Aniline) (Hydrocarbons)	C	A	X	A	A	A	B	A	A	A	A	ND	ND	ND
ASTM — Ref #4 Oil (High Aniline) (Hydrocarbons)	X	B	X	ND	A	A	ND	A	A	A	A	ND	ND	ND
ASTM — Ref Motor Fuel (A) (Aliphatic) (Hydrocarbons)	B	A	X	A	A	A	ND	A	A	A	A	ND	ND	ND
ASTM — Ref Motor Fuel (B) (30% Aromatic) Hydrocarbons	X	A	X	A	A	A	ND	A	A	A	A	ND	ND	ND
ASTM — Ref Motor Fuel (C) (50% Aromatic) (Hydrocarbons)	X	B	X	C	A	A	ND	A	A	A	A	ND	ND	ND
Aviation Gasoline Hydrocarbons	C	A	X	ND	A	A	ND	A	A	A	A	ND	ND	ND
Barbeque Sauce Water, oils, spices	A	A	ND	ND	ND	A	ND	ND	X	A	ND	ND	ND	ND
Barium Carbonate BaCO3	A	A	A	ND	A	A	A	X	B	B	B	A	ND	A
Barium Chloride Dihydrate BaCl2 • 2H2O	A	A	A	ND	A	A	ND	50%B	B	B ^{212°}	B	ND	A	A
Barium Cyanide Ba(CN)2	A	C	ND	X	A	ND	A	ND	ND	A	ND	X	ND	ND
Barium Hydroxide (Barium Hydrate) Ba(OH)2	A	A	A	B	A	A	A	X	B	50%A ^{122°}	B	A	ND	A
Barium Nitrate Ba(NO3)2	A	A	ND	ND	ND	A	A	B	A	A	A	A	B	A
Barium Sulfate (Blanc Fixe) BaSO4	A	A	A	X	A	A	A	B	B	B	ND	A	B	A
Barium Sulfide BaS	A	A	A	ND	A	A	A	X	ND	B	A	A	ND	A
Beef Extract	A	A	ND	ND	A	A	ND	ND	X	A	ND	ND	ND	ND
Beer Water, carbonate	A	C	A	B	A	A	A	A	X	A	A	A ^{75°}	A	A ^{175°}
Beet Sugar Liquors (Sucrose)	A	A	A	ND	A	A	A	A	B	A	ND	A	B	A
Benzaldehyde C6H5CHO	X	X	B	B	X	A	B	A	A	A	A	X	ND	A
Benzene (Benzol) C6H6	X	X	X	C ^{70°}	B	A	C	B	B	A ^{167°}	B	X	A	B
Benzene Sulfonic Acid C6H5SO3H	A	C	C	ND	A	A	ND	C	A	A	90%A	X	ND	B ^{100°}
Benzoic Acid (Benzene Carboxylic Acid) C6H5COOH	B	X	B	ND	A	A	ND	B	X	B	70%A	X	B	A
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	Neoprene	Nitrile	E.P.D.M.	Hytrel	(FKM) Fluorocarbon	PTFE, PFA	Santoprene	Aluminum	Cast Iron / Steel	Stainless Steel	Alloy C (Hastelloy Equiv)	Polypropylene	Acetal	PVDF
Benzoyl Chloride C6H5COCl	X	X	X	ND	B	A	ND	X	A	B	B	ND	ND	A
Benzyl Acetate CH3CO2 • H2C6H5	ND	X	ND	ND	X	A	ND	A	A	A	B	ND	ND	ND
Benzyl Alcohol C6H5CH2OH	X	X	C	X	A	A	ND	A	A	A	B	A	ND	A
Benzyl Benzoate C6H5CO2CH2C6H5	X	X	B	ND	A	A	C	A	B	B	B	ND	ND	ND
Benzyl Chloride (Chlorotoluene) C6H5CH2Cl	X	X	X	ND	A	A	C	X	A	B	A	X	A	A
Benzyl Dichloride (Benzal Chloride) C6H5CHCl2	ND	X	ND	ND	ND	A	ND	X	B	A	B	ND	ND	ND
Biphenyl (Diphenyl) C6H5C6H5	X	X	X	ND	A	A	ND	A	A	ND	ND	ND	ND	ND
Bismuth Subcarbonate (Bismuth Carbonate) (BiO)2CO3	A	A	A	ND	A	A	ND	ND	ND	10%B	ND	ND	ND	ND
Black Sulfate Liquor	A	B	A	B	A	A	ND	C	B	A	B	ND	ND	ND
Blast Furnace Gas CO,H2,CH4,CO2,N2	A	C	ND	B	A	A	A	ND	ND	ND	ND	ND	ND	ND
Bleach Solutions Water, chlorine, oxygen	X	X	A	C	B	A	B	X	ND	B	A ^{125°}	X	ND	ND
Blood	A ^{70°}	AC ^{70°}	A ^{70°}	ND	A ^{70°}	A ^{200°}	ND	ND	X	A ^{70°}	ND	A ^{70°}	ND	A
Borax (Sodium Borate) B4Na2O7	A	B	A	A	A	A	A	B	B	A	A	A	B	A
Bordeaux Mixture Copper sulfate salts	A	A	A	B	B	A	A	ND	ND	A	A	ND	ND	ND
Boric Acid (Boracic Acid) H3BO3	A	A	A	A	A	A	A	A	X	30%A	80%A ^{167°}	A	C	A
Brake Fluid (Non-Petroleum Base) Silicones or glycols	A	X	A	ND	ND	A	A	A	A	A	A	X	ND	ND
Brewery Slop	A	A	ND	ND	A	A	A	ND	A	A	ND	ND	ND	ND
Brine (Sodium Chloride) Salt water	B	A	A	B	A	A	ND	ND	X	A	A	A	ND	A
Bromine — Anhydrous Br2	X	X	C	X	A	A	C	B	C	X	A	X	ND	A ^{150°}
Bromine Trifluoride BrF3	X	X	X	ND	X	A	C	A	ND	B	ND	X	ND	ND
Bromine Water	B	X	X	ND	B	A	B	X	X	X	A	X	ND	A
Bromobenzene C6H5Br	X	X	X	ND	B	A	X	X	B	A	B	X	ND	ND
Bromochloromethane BrCH2Cl	X	X	B	ND	C	A	ND	X	B	B	B	ND	ND	ND
Bromotoluene C6H4BrCH3	ND	X	ND	ND	B	A	ND	X	A	A	A	ND	ND	ND
Bronzing Liquid	X	X	B	ND	X	A	A	ND	ND	A	A	ND	ND	ND

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RATING KEY: (A) Excellent (B) Good (C) Fair to Poor (X) Not Recommended (ND) No Data Available

CHEMICAL FORMULA	ELASTOMERS							METAL PARTS				PLASTICS		
	Neoprene	Nitrile	E.P.D.M.	Hytrel	(FKM) Fluorocarbon	PTFE, PFA	Santoprene	Aluminum	Cast Iron / Steel	Stainless Steel	Alloy C (Hastelloy Equiv)	Polypropylene	Acetal	PVDF
Bunker Oil (Fuel) #5, #6 & C Hydrocarbons	B	A	X	ND	A	A	B	A	A	A	A	ND	ND	ND
Butadiene C4H6	C	X	C	ND	C	A	C	A	A	A	ND	X	ND	A
Butane (LPG) (Butyl Hydride) C4H10	B	A	X	A	A	A	C	A	A	A	A	X	B	A
Butter Fats	C	A	A	B	A	A	B	A	X	A	ND	ND	ND	ND
Buttermilk Fats, water	A	A	ND	ND	A	ND	A	A	ND	A	ND	A	ND	A
Butyl Acetate CH3CO2(CH2)3CH3	X	X	B	C	X	A	B	A	A	A	A	X	B	A ^{100°}
Butyl Acetyl Ricinoleate C24H44O5	X	C	C	ND	B	A	B	ND	ND	ND	A	ND	ND	ND
Butyl Acrylate CH2CHCO2C4H9	X	X	X	ND	X	A	C	ND	ND	ND	ND	ND	ND	C
Butyl Alcohol (Butanol) CH3(CH2)3OH	A	A	C	B	A	A	A	A	ND	A	A	B	A	A
Butyl Amine (Aminobutane) CH3(CH2)2CH2NH2	X	B	X	ND	X	A	A	A	A	A	ND	X	C	B ^{70°}
Butyl Benzoate C6H5COO • (CH2)3CH3	X	ND	B	ND	A	A	C	B	B	B	B	ND	ND	ND
Butyl Bromide CH3(CH2)2CH2Br	ND	X	ND	ND	B	A	ND	ND	ND	ND	ND	ND	ND	A
Butyl Butyrate CH3(CH2)2 • CH2CO2C4H9	ND	X	ND	ND	X	A	ND	A	A	A	A	ND	ND	ND
Butyl Carbitol® CH3(CH2)3OCH2 CH2OCH2CH2OH	B	B	B	ND	A	A	B	ND	ND	ND	ND	ND	ND	ND
Butyl Cellosolve® HOCH2CH2OC4H9	C	B	ND	ND	C	A	A	ND	ND	ND	ND	ND	ND	B
Butyl Chloride (Chlorobutane) CH3(CH2)3CL	ND	X	ND	ND	A	A	ND	X	B	B	B	X	ND	A
Butyl Ether (Dibutyl Ether) (CH3(CH2)3)2O	B	A	ND	ND	C	A	ND	A	B	A	A	X	ND	A ^{100°}
Butyl Oleate C22H42O2	X	ND	C	ND	A	A	C	ND	ND	ND	ND	ND	ND	ND
Butyl Stearate CH3(CH2)16 CO2(CH2)3CH3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Butylene (Butene) C4H8	X	B	X	ND	B	A	X	A	ND	A	ND	X	ND	A
Butyraldehyde CH3(CH2)2CHO	X	X	C	ND	X	A	C	A	A	A	A	ND	ND	ND
Butyric Acid CH3(CH2)2CO2H	X	C	C	B	C	A	A	A	X	B	A	A	X	A
Butyronitrile CH3CH2CH2CN	X	X	A	ND	ND	A	ND	ND	ND	ND	ND	ND	ND	ND

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CHEMICAL FORMULA	ELASTOMERS							METAL PARTS				PLASTICS		
	Neoprene	Nitrile	E.P.D.M.	Hytrel	(FKM) Fluorocarbon	PTFE, PFA	Santoprene	Aluminum	Cast Iron / Steel	Stainless Steel	Alloy C (Hastelloy Equiv)	Polypropylene	Acetal	PVDF
Calcium Acetate Hydrate Ca(CH3COO)2 • H2O	Cc	B	A	ND	X	A	ND	C	C	B	B	ND	ND	ND
Calcium Bisulfite Ca(HSO3)2	A	A	X	X	A	A	ND	X	X	90%A	A	ND	A	X
Calcium Carbonate (Chalk) CaCO3	A	A	A	ND	A	A	A	C	B	B	B	A	A	A
Calcium Chlorate Ca(ClO3)2	A	A	A	ND	A	A	ND	30%B	B	0%B	70%B	A	ND	A
Calcium Chloride (Brine) CaCl2 • 6H2O	A	A	A	A	A	A	A	A	A	A	A	A	X	A
Calcium Hydrosulfide (Calcium Sulfhydrate) Ca(HS)2 • 6H2O	ND	A	ND	ND	A	A	ND	ND	ND	ND	ND	ND	ND	ND
Calcium Hydroxide (Slaked Lime) Ca(OH)2	A	A	A	B	A	A	A	X	B	50%B	50%A	A	X	A
Calcium Hypochlorite 20% (Calcium Oxichloride) Ca(ClO)2	X	C	B	5%A	B	A	A	X	X	B	B ^{125°}	A	A	A
Calcium Nitrate Ca(NO3)2	A	A	A	ND	A	A	A	40%B ^{212°}	30%B ^{212°}	50%B ^{212°}	10%B	A	X	A
Calcium Oxide (Unslaked Lime) • CaO	A	A	A	B	ND	A	ND	A	A	A	A	ND	ND	ND
Calcium Silicate Ca2SiO4	ND	A	ND	ND	A	A	ND	A	B	A	A	ND	ND	ND
Calcium Sulfate (Gypsum) CaSO4	A	A	A	ND	A	A	ND	A	C	10%B	10%A	A	A	X
Calcium Sulfide CaS	B	A	A	ND	A	A	A	20%A	B	B	A	A ^{120°}	ND	A
Calcium Sulfite CaSO3 • 2H2O	ND	A	ND	ND	A	A	ND	10%B	B	10%A	ND	ND	ND	ND
Calgon® (NaPO3)6	A	A	ND	ND	A	ND	A	ND	X	A	ND	A	ND	ND
Cane Juice, Sucrose, water	A	A	ND	ND	ND	ND	A	B	A	A	ND	X	ND	ND
Cane Sugar Liquors Sucrose, water	A	A	A	B	A	A	A	A	A	A	ND	A	ND	A
Capryl Alcohol (Octanol) CH3(CH2)6CH2OH	B	A	C	ND	B	A	ND	A	A	A	A	ND	ND	ND
Caprylic Acid (Octanoic Acid) CH3(CH2)6 COOH	ND	C	ND	ND	ND	A	ND	A	ND	A	A	ND	ND	A
Carbamate H2NCO2R	C	C	C	ND	A	A	A	ND	ND	ND	ND	ND	ND	ND
Carbitol® CH3CH2OCH2CH2 • OCH2CH2OH	C	B	C	ND	C	A	B	A	A	A	A	ND	ND	ND
Carbolic Acid (see Phenol) C6H5OH	C	X	C	ND	A	A	A	B	A	B	A	C	X	A ^{150°}

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CHEMICAL FORMULA	ELASTOMERS							METAL PARTS				PLASTICS		
	Neoprene	Nitrile	E.P.D.M.	Hytrel	(FKM) Fluorocarbon	PTFE, PFA	Santoprene	Aluminum	Cast Iron / Steel	Stainless Steel	Alloy C (Hastelloy Equiv)	Polypropylene	Acetal	PVDF
Carbon Dioxide (Carbonic Acid Gas) CO2	A	A	B	A	A	A	A	A	A	A	A	A	A	A
Carbon Disulfide (Carbon Bisulfide) CS2	X	X	X	C	A	A	X	A	B	90%A	ND	X	B	A
Carbon Monoxide CO	A	C	C	A	C	A	A	A	A	A	A	A	B	A
Carbon Tetrachloride (Tetrachloromethane) CCL4	X	C	X	X	A	A	X	X	C	B	A	X	B	A
Carbonated Beverages CO2/H2O	A	A	ND	ND	ND	A	A	C	ND	A	A	A	ND	A
Carbonic Acid (liquid) H2CO3	A	B	ND	C	A	A	A	A	X	B	A	A	A	A
Casein a phosphoprotein	A	A	A	ND	A	A	ND	B	ND	B	B	ND	ND	ND
Castor Oil a mixture of fatty acids	A	A	B	B	A	A	B	A	B	A	A	ND	ND	ND
Catsup (Ketchup)	C	A	ND	ND	A	A	A	B	X	A	A	A	ND	ND
Cellosolve® (Glycol Ethers) HOCH2CH2OR	C	C	C	X	B	A	C	A	ND	A	A	A ^{100°}	A	A
Cellulose Acetate C8H12O5	B	B	ND	ND	C	A	ND	B	B	A	A	ND	ND	ND
Cellulube® Hydraulic Fluids (Phosphate Esters)	X	X	A	C	B	A	X	A	A	A	A	ND	ND	ND
Chlorinated Lime—35% (Bleach) CA(ClO)2	X	C	A	6%A	A	A	X	ND	X	A	ND	ND	ND	ND
Chlorinated Water	C	C	ND	X	A	A	ND	C	ND	B	A	B	X	A
Chlorine Dioxide ClO2	X	X	C	ND	B	A	X	B	ND	X	B	X	ND	A
Chlorine Trifluoride ClF3	X	X	X	ND	B	A	X	A	ND	A	ND	X	ND	ND
Chlorine, Anhydrous Liquid Cl2	X	X	ND	ND	A	A	X	X	X	X	A	X	ND	A
Chlorine, Dry Cl2	C	C	ND	X	A	A	C	X	X	ND	ND	X	X	A
Chlorine, Wet Cl2/H2O	X	C	X	X	A	A	C	B	C	A	A	X	X	A
Chloroacetic Acid (Monochloroacetic Acid) ClCH2COOH	C	X	B	X	C	A	ND	X	X	X	A	A	X	A
Chloroacetone (Monochloroacetone) ClCH2COCH3	C	X	A	ND	C	A	C	X	B	B	B	X	ND	ND
Chlorobenzene (Monochlorobenzene) C6H5Cl	X	X	X	X	A	A	C	X	B	B	B	X	A	A ^{150°}

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CHEMICAL FORMULA	ELASTOMERS							METAL PARTS				PLASTICS		
	Neoprene	Nitrile	E.P.D.M.	Hytel	(FKM) Fluorocarbon	PTFE, PFA	Santoprene	Aluminum	Cast Iron / Steel	Stainless Steel	Alloy C (Hastelloy Equiv)	Polypropylene	Acetal	PVDF
Chlorobromomethane ClCH2Br	X	X	ND	ND	A	A	X	X	B	B	ND	X	ND	ND
Chlorobutadiene (Chloroprene) C4H5CL	X	X	X	ND	A	A	C	X	B	B	B	X	ND	ND
Chloroform CHCl3	X	X	X	X	A	A	X	X	A	A	A	X	B	A
Chlorosulfonic Acid HSO3CL	X	X	X	X	X	A	A	B	B	B	A	X	X	X
Chlorothene® (Chlorinated Solvents) CH3CCL3	X	X	ND	ND	C	A	ND	X	X	A	A	ND	ND	ND
Chlorotrifluoroethylene C2H2CIF3	ND	X	ND	ND	ND	A	ND	B	B	B	B	ND	ND	ND
Chlorox®	B	C	ND	ND	A	A	B	ND	X	A	B	B	ND	ND
Chocolate Syrup Corn syrup, water, sugar	A	A	ND	ND	ND	A	A	ND	X	A	ND	A	ND	ND
Chromic Acid — 25%-50% H2CrO4	X	X	C	X	A	A	X	X	B	X	B	A	X	A ^{120°}
Chromic Acid — Over 50% H2CrO4	X	X	C	X	A	A	X	X	B	X	B	X	X	A ^{120°}
Chromic Acid — To 10% H2CrO4	X	X	A	X	A	A	X	10%B	B	X	B	X	X	A ^{120°}
Cider (Apple Juice) Sucrose, water	A	A	ND	B	A	A	A	B	X	A	A	ND	ND	ND
Cinnamon Oil Cinnamic acid esters	C	ND	ND	ND	ND	A	C	ND	X	A	ND	ND	ND	ND
Citric Acid C6H8O7 • H2O	A	B	A	A	A	A	A	B	X	30%A	A	B	B	A ^{250°}
Citric Oils Citric acid esters	X	C	B	ND	A	A	C	ND	X	A	ND	A	ND	ND
Citrus Pectin Liquor	A	A	ND	ND	A	A	ND	ND	ND	A	ND	ND	ND	ND
Clove Oil (Eugenol) C10H12O2	C	ND	ND	ND	ND	A	C	ND	X	A	ND	ND	ND	ND
Cobalt Chloride CoCl2 • 6H2O	A	A	C	ND	A	A	A	X	ND	ND	ND	A	ND	ND
Coconut Oil (Coconut Butter) Fatty acid mixture	B	B	A	ND	A	A	B	B	A	A	ND	ND	ND	ND
Cod Liver Oil (Fish Oil) Glycerides, acids, esters	B	B	A	ND	A	A	C	A	X	A	ND	ND	ND	ND
Coffee Fatty oils, acids, cellulose, water	A	A	ND	ND	ND	A	A	A	ND	A	A	A	ND	ND
Coke Oven Gas H2(53%),CH4(26%) • N2(11%),CO(7%) • hydrocarbons (3%)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Copper Acetate Cu(C2H3O2)2 • CuO • 6H2O	C	B	A	ND	ND	A	A	X	90%A	10%B	10%B	ND	ND	A

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CHEMICAL FORMULA	ELASTOMERS							METAL PARTS				PLASTICS		
	Neoprene	Nitrile	E.P.D.M.	Hytel	(FKM) Fluorocarbon	PTFE, PFA	Santoprene	Aluminum	Cast Iron / Steel	Stainless Steel	Alloy C (Hastelloy Equiv)	Polypropylene	Acetal	PVDF
Copper Chloride CuCl2 • 2H2O	A	A	A	A	A	A	A	X	X	X	40%B	A	ND	A
Copper Cyanide CuCN	A	A	A	ND	A	A	A	X	A	10%A	A170°	A	ND	A
Copper Fluoroborate	ND	A	B	ND	ND	ND	ND	A	X	X	X	B	ND	ND
Copper Nitrate Hexahydrate Cu(NO3)2 • 6H2O	A	A	A	ND	A	A	ND	X	X	A	B	A	A	A
Copper Sulfate (Blue Copperas) CuSO4 • 5H2O	A	A	A	A	A	A	5%A	X	X	10%A	A	A	A	A
Copper Sulfide CuS	ND	A	ND	ND	A	A	ND	ND	ND	ND	ND	ND	ND	ND
Corn Oil (Maize oil) Glycerides of fatty acids	C	A	C	A	A	A	B	B	C	B	ND	A	ND	A
Cotton Seed Oil	A	C	A	A	A	A	A	B	A	C	A	ND	A	B
Cream	ND	C	A	ND	ND	ND	A	A	ND	X	A	ND	A	ND
Creosote, Coal-Tar (Tar Oil) Hydrocarbon mixture	C	A	X	X	A	A	B	B	B	B	B	X	X	ND
Creosote, Wood-Tar Mixture of phenols	B	A	X	X	A	A	ND	ND	ND	B	ND	X	X	ND
Cresylic Acid (Cresol) C8H10O2	X	C	X	ND	A	A	B	B	C	A	B	X	X	A150°
Crotonaldehyde CH3CHCHCHO	A	X	ND	ND	A	A	ND	A	A	A	A	ND	ND	ND
Cumeme (Isopropylbenzene) C6H5CH(CH3)2	X	X	X	ND	A	A	ND	B	B	B	B	ND	ND	ND
Cutting Oil (Sulfur Base)	C	A	ND	ND	ND	A	ND	A	A	A	A	ND	ND	ND
Cutting Oil (Water Soluble)	X	C	ND	ND	A	A	ND	A	A	A	A	ND	ND	ND
Cyclohexane C6H12	X	B	X	A	A	A	C	B	B	B	B	X	A	A
Cyclohexanol C6H11OH	A	B	X	ND	A	A	B	C	B	A	A	B	A	A150°
Cyclohexanone C6H10O	X	X	C	ND	X	A	C	B	B	B	B	X	A	A
Cyclopentane C5H10	A	B	X	ND	A	A	ND	B	B	B	B	ND	ND	ND
Cymene (Isopropyltoluene) C10H14	X	C	X	ND	A	A	ND	ND	ND	ND	ND	ND	ND	ND
Decahydronaphthalene (Decalin®) C10H18	X	X	X	ND	A	A	ND	ND	ND	ND	ND	ND	ND	ND
Decanal CH3(CH2)8CHO	ND	X	X	ND	X	A	ND	ND	ND	ND	ND	ND	ND	ND
Decane CH3(CH2)8CH3	X	B	C	ND	A	A	C	ND	ND	ND	ND	A70°	ND	A
Decyl Alcohol (Decanol) C10H21OH	X	A	ND	ND	B	A	ND	ND	ND	ND	ND	ND	ND	ND

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CHEMICAL FORMULA	ELASTOMERS							METAL PARTS				PLASTICS		
	Neoprene	Nitrile	E.P.D.M.	Hytrel	(FKM) Fluorocarbon	PTFE, PFA	Santoprene	Aluminum	Cast Iron / Steel	Stainless Steel	Alloy C (Hastelloy Equiv)	Polypropylene	Acetal	PVDF
Denatured Alcohol Ethanol and denaturant	B	A	A	ND	B	A	B	B	B	A	A	A	ND	A
Detergent Solutions	A	A	A	B	A	A	B	B	ND	A	ND	A	A	ND
Developing Fluids & Solutions	A	A	C	X	A	A	A	ND	X	A	A	ND	ND	ND
Dextrose C6H12O6	B	B	A	B ^{140°}	A	A	ND	A	X	A	A	A	ND	A
Diacetone Alcohol (Diacetone) CH3COCH2C(CH3)2OH	X	X	A	C	X	A	B	A	A	A	A	B	A	B
Dibenzyl Ether (C6H5CH2)2O	X	X	C	ND	C	A	C	B	B	B	B	ND	ND	C
Dibenzyl Sebecate C24H30O4	X	X	C	A	B	A	C	ND	ND	ND	ND	ND	ND	ND
Dibutyl Amine (C4H9)2NH	X	C	X	ND	X	A	B	ND	A	A	A	X	ND	B ^{70°}
Dibutyl Mercaptan (C4H9)2S	X	X	ND	ND	A	A	B	ND	ND	ND	ND	ND	ND	ND
Dibutyl Phthalate (DBP) C6H4(CO2C4H9)2	X	X	A	A	B	A	B	A	A	A	A	X	ND	X
Dibutyl Sebecate (DBS) C18H34O4	X	X	C	ND	C	A	B	ND	A	A	ND	C	ND	ND
Dichloro Isopropyl Ether C6H12OC12	X	X	X	ND	X	A	X	ND	ND	ND	ND	X	ND	ND
Dichloroacetic Acid C12CHCOOH	X	X	ND	ND	X	A	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorobutane C4H8Cl2	ND	X	ND	ND	A	A	ND	X	B	B	ND	ND	ND	ND
Dichloroethyl Ether [C1CH2CH2]2O	ND	X	ND	ND	ND	A	ND	B	ND	ND	ND	ND	ND	ND
Dicyclohexylamine (C6H11)2NH	X	X	X	ND	B	A	B	ND	ND	ND	ND	ND	ND	ND
Diesel Oil (Fuel ASTM #2) Hydrocarbons	C	A	X	B	A	A	C	A	A	A	A	B	ND	A
Diester Synthetic Oils	X	B	X	ND	A	A	ND	A	A	A	A	ND	ND	ND
Diethano Amine (HOCH2CH2)2NH	A	B	ND	ND	ND	A	ND	ND	A	A	A	A	ND	ND
Diethyl Amine (CH3CH2)2NH	C	C	C	ND	X	A	ND	B	B	A	A	A	ND	A
Diethyl Benzene C6H4(C2H5)2	X	X	X	ND	A	A	C	ND	ND	ND	ND	ND	ND	ND
Diethyl Carbonate (C2H5O)2CO	X	X	ND	ND	ND	A	ND	ND	A	ND	ND	ND	ND	ND
Diethyl Ether (Ether) (CH3CH2)2O	C	B	X	C	X	A	B	B	A	A	A	X	A	A
Diethyl Phthalate (DEP) C6H4(CO2C2H5)2	ND	X	ND	ND	C	A	ND	A	A	A	A	ND	ND	ND

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CHEMICAL FORMULA	ELASTOMERS							METAL PARTS				PLASTICS		
	Neoprene	Nitrile	E.P.D.M.	Hytrel	(FKM) Fluorocarbon	PTFE, PFA	Santoprene	Aluminum	Cast Iron / Steel	Stainless Steel	Alloy C (Hastelloy Equiv)	Polypropylene	Acetal	PVDF
Diethyl Sebecate C14H26O4	X	X	C	A	B	A	B	A	A	A	A	A ^{120°}	ND	A ^{120°}
Diethylene Ether (Dioxane) C4H8O2	X	X	A	ND	X	A	ND	A	A	A	ND	ND	ND	ND
Diethylene Glycol (DEG) HOCH2CH2OCH2 • CH2OH	A	A	A	A	A	A	A	A	A	A	A	A	ND	ND
Diethylene Triamine (NH2C2H4)2NH	ND	B	ND	ND	ND	A	ND	A	A	A	A	ND	ND	ND
Diisobutyl Ketone C4H9COC4H9	X	X	B	ND	X	A	ND	A	A	A	A	ND	ND	ND
Diisobutylene [HC=C(CH3)2]2	C	B	ND	ND	C	A	C	ND	ND	ND	ND	A	ND	A
Diisodecyl Adipate (DIDA) C26H50O4	ND	X	ND	ND	C	A	ND	ND	ND	ND	ND	ND	ND	ND
Diisodecyl Phthalate (DIDP) C28H47O4	X	X	A	ND	C	A	ND	ND	ND	ND	ND	ND	ND	ND
Diisooctyl Adipate (DIOA) C22H42O4	ND	X	ND	ND	C	A	ND	A	A	A	A	ND	ND	ND
Diisooctyl Phthalate (DIOP) C24H39O4	ND	X	ND	ND	C	A	ND	ND	ND	ND	ND	ND	ND	ND
Diisooctyl Sebecate (DIOS) C26H46O4	ND	ND	B	ND	A	A	ND	ND	ND	ND	ND	ND	ND	ND
Diisopropyl Amine [(CH3)2CH]2NH	ND	B	ND	ND	ND	A	ND	ND	ND	ND	ND	ND	ND	ND
Diisopropyl Benzene C6H4 • [CH(CH3)2]2	X	X	X	ND	A	A	C	ND	ND	ND	ND	ND	ND	ND
Diisopropyl Ketone [(CH3)2CH]2CO	X	X	A	ND	X	A	C	ND	ND	A	ND	ND	ND	ND
Dimethyl Ether CH3OCH3	B	A	ND	ND	A	A	ND	B	B	B	B	ND	ND	ND
Dimethyl Phthalate C6H4(CO2CH3)2	X	X	C	A	C	A	A	ND	ND	ND	ND	ND	ND	A ^{70°}
Dimethyl Sulfate (CH3)2SO4	ND	X	ND	ND	X	A	ND	ND	A	ND	ND	ND	ND	ND
Dimethyl Sulfide (CH3)2S	ND	X	ND	ND	ND	A	ND	A	A	A	A	ND	ND	ND
Dinitrotoluene (DNT)CH3C6H3(NO2)2	X	X	X	ND	C	A	B	ND	ND	A	ND	ND	ND	ND
Diocetyl Phthalate (DOP) C24H38O4	X	X	B	A	B	A	C	A	A	A	A	ND	ND	ND
Diocetyl Sebecate C26H50O4	X	X	C	ND	C	A	C	A	A	A	A	ND	ND	ND
Dioxolanes (Dioxolans) Glycol ethers	X	X	B	ND	C	A	C	ND	ND	ND	ND	ND	ND	ND
Dipentene (Limonene) C10H16	X	C	X	ND	A	A	C	A	A	A	A	ND	ND	ND

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RATING KEY: (A) Excellent (B) Good (C) Fair to Poor (X) Not Recommended (ND) No Data Available

CHEMICAL FORMULA	ELASTOMERS							METAL PARTS				PLASTICS		
	Neoprene	Nitrile	E.P.D.M.	HytreI	(FKM) Fluorocarbon	PTFE, PFA	Santoprene	Aluminum	Cast Iron / Steel	Stainless Steel	Alloy C (Hastelloy Equiv)	Polypropylene	Acetal	PVDF
Diphenyl Oxides (Phenyl Ether) C6H5OC6H5	X	X	C	ND	A	A	C	B	A	A	A	ND	ND	A
Dipropyl Ketone (Butyrene) (C3H7)2CO	ND	X	ND	ND	ND	A	ND	ND	ND	ND	ND	ND	ND	ND
Dipropylamine (CH3CH2CH2)2 NH	ND	B	ND	ND	ND	A	ND	ND	ND	ND	ND	ND	ND	ND
Dipropylene Glycol (C3H6OH)2O	ND	A	ND	ND	A	A	ND	ND	ND	ND	ND	A	ND	A
Dispersing Oil #10	X	X	X	ND	C	A	ND	A	A	A	A	ND	ND	ND
Divinyl Benzene (DVB) C6H4(CH=CH2)2	ND	X	ND	ND	A	A	ND	ND	ND	ND	ND	ND	ND	ND
Dodecyl Benzene (Alkane) C6H5(CH2)11CH3	ND	X	ND	ND	A	A	ND	A	A	A	ND	ND	ND	ND
Dow Corning® (Silicones) [(CH3)2SiO]2	A	A	ND	ND	A	A	ND	A	ND	ND	ND	ND	ND	ND
Dowtherm®(Biphenyl & Phenyl Ether) (C6H5)2 and (C6H5)2O	X	X	X	ND	A	A	X	A	B	A	A	ND	ND	ND
Drycleaning Fluids Chlorinated hydrocarbons	X	C	ND	ND	A	A	X	A	A	A	ND	X	ND	ND
Dyes	ND	C	ND	ND	ND	ND	ND	B	B	ND	A	ND	ND	ND
Epichlorohydrin C3H5ClO	X	X	B	X	X	A	B	X	A	A	A	A	A	X
Epsom Salts (Magnesium Sulfate) MgSO4 • 7H2O	A	A	ND	ND	A	A	A	A	ND	A	B	A	ND	A
Ethane C2H6	C	A	X	ND	A	A	C	A	A	A	A	C	A	ND
Ethanolamine (Aminoethanol) H2NCH2 • CH2OH	C	B	B	ND	X	A	A	B	A	A	ND	X	X	C
Ethyl Acetate CH3COOC • H2CH3	X	X	B	C	X	A	C	A	A	A	A	C	A	A
Ethyl Acetoacetate (Acetoacetic Ester) CH3COCH2 • COOCH2CH3	X	X	C	ND	X	A	C	A	A	A	A	ND	ND	A ^{70°}
Ethyl Acrylate CH2CHCO2 • CH2CH3	X	X	C	ND	X	A	C	A	A	A	A	B	ND	B ^{70°}
Ethyl Alcohol (Ethanol) C2H5OH	A	A	A	A	B	A	A	B	A	A	A	A ^{180°}	A	A
Ethyl Aluminum Dichloride CH3CH2AlCl2	ND	X	ND	ND	B	A	ND	ND	ND	ND	ND	ND	ND	ND
Ethyl Amine (Monoethylamine) CH3CH2NH2	C	X	A	ND	X	A	ND	B	B	A	ND	ND	ND	ND
Ethyl Benzene CH3CH2C6H5	X	X	X	ND	A	A	C	B	B	B	A	X	A	A
Ethyl Benzoate C6H5CO2CH2CH3	X	X	C	ND	A	A	C	A	A	A	A	B	ND	ND

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CHEMICAL FORMULA	ELASTOMERS							METAL PARTS				PLASTICS		
	Neoprene	Nitrile	E.P.D.M.	Hytrel	(FKM) Fluorocarbon	PTFE, PFA	Santoprene	Aluminum	Cast Iron / Steel	Stainless Steel	Alloy C (Hastelloy Equiv)	Polypropylene	Acetal	PVDF
Ethyl Bromide (Bromoethane) CH3CH2Br	B	X	B	ND	ND	A	X	A	A	A	ND	ND	ND	ND
Ethyl Butyl Acetate CH3CO2CH2 • CH(C2H5)2	ND	X	ND	ND	X	A	ND	ND	ND	ND	ND	ND	ND	ND
Ethyl Butyl Alcohol CH3CH(C2H5) • (CH2)2OH	ND	A	ND	ND	B	A	ND	ND	ND	ND	ND	ND	ND	ND
Ethyl Butyl Ketone CH3CH2COC4H9	ND	X	ND	ND	X	A	ND	ND	ND	ND	ND	ND	ND	ND
Ethyl Butyraldehyde C6H12O	ND	X	ND	ND	X	A	ND	ND	ND	ND	ND	ND	ND	ND
Ethyl Butyrate CH3CH2CH2 • C140° CO2C2H5	X	X	X	ND	C	A	ND	B	A	A	A	B	ND	ND
Ethyl Caprylate CH3(CH2)6 • CO2C2H5	ND	X	X	X	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethyl Cellosolve® C2H5O(CH2)2OH	C	C	B	ND	X	A	B	ND	ND	ND	ND	ND	ND	ND
Ethyl Cellulose (Ethocel®)	B	B	B	B	C	A	A	B	A	B	B	C	ND	ND
Ethyl Chloride (Chloroethane) C2H5Cl	C	A	A	X	A	A	C	X	B	A	B	X	A	A
Ethyl Chlorocarbonate (Ethyl Chloroformate) ClCO2C2H5	C	ND	ND	ND	A	A	A	ND	ND	ND	ND	ND	ND	ND
Ethyl Cyanide (Propionitrile) C2H5CN	B	X	A	ND	X	A	ND	ND	ND	ND	ND	ND	ND	ND
Ethyl Formate HCOOCH2 CH3	B	X	C	ND	A	A	B	B	A	B	B	ND	ND	ND
Ethyl Iodide CH3CH2I	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethyl Isobutyrate (CH3)2 • CHCOOCH2CH3	X	X	X	ND	ND	A	ND	ND	ND	ND	ND	ND	ND	ND
Ethyl Mercaptan (Ethanethiol) CH3CH2SH	C	X	X	ND	B	A	C	B	A	B	B	ND	ND	ND
Ethyl Oxalate C2H5O2C • CO2C2H5	X	X	A	ND	B	A	B	ND	ND	ND	ND	ND	ND	ND
Ethyl Pentachlorobenzene C2H5C6Cl5	X	X	ND	ND	A	A	X	X	ND	ND	ND	X	ND	ND
Ethyl Propionate CH3CH2 • COOCH2CH3	X	X	X	ND	ND	A	ND	A	A	A	A	ND	ND	ND
Ethyl Silicate Si(OCH2CH3)4	A	A	A	ND	A	A	B	B	A	A	A	ND	ND	ND
Ethyl Sulfate C2H5OSO2OH	ND	A	ND	ND	A	A	B	ND	ND	X	ND	ND	ND	ND
Ethylene (Ethene) C2H4	A	B	C	ND	A	A	C	A	A	A	ND	ND	ND	ND
Ethylene Chlorohydrin ClCH2CH2OH	B	X	A	X	B	A	C	ND	B	A	A	X	ND	A ^{70°}

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CHEMICAL FORMULA	ELASTOMERS							METAL PARTS				PLASTICS		
	Neoprene	Nitrile	E.P.D.M.	Hytel	(FKM) Fluorocarbon	PTFE, PFA	Santoprene	Aluminum	Cast Iron / Steel	Stainless Steel	Alloy C (Hastelloy Equiv)	Polypropylene	Acetal	PVDF
Ethylene Diamine (CH2)2(NH2)2	A	B	A	ND	X	A	A	C	A	A	A	A	A	B
Ethylene Dibromide (Ethylene Bromide) Br(CH2)2Br	X	X	C	ND	B	A	ND	X	X	B	B	X	ND	A
Ethylene Dichloride (Dutch Oil) Cl(CH2)2Cl	X	X	X	X	B	A	X	X	B	B	B	X	B	A
Ethylene Glycol (Ethylene Alcohol) (Glycol) (CH2OH)2	A	A	A	A	A ^{70°}	A	A	A	A	A	A	A ^{120°}	A	A
Ethylene Glycol Monobutyl (Ether) (Butyl Cellosolve®) C4H9OCH2CH2OH	X	B	B	ND	C	A	ND	A	A	A	A	ND	ND	ND
Ethylene Glycol Monoethyl (Ether Acetate) (Cellosolve®) C2H5O(CH2)2 • O2CCH3	X	C	B	ND	C	A	ND	A	A	A	A	ND	ND	ND
Ethylene Glycol Monomethyl (Ether) (Methyl Cellosolve®) CH3O(CH2)2OH	C	C	B	ND	X	A	ND	B	B	A	A	ND	ND	ND
Ethylene Oxide (CH2)2O	X	X	X	A	C	A	A	A	B	A	A	C	ND	A
Ethylene Trichloride (Trichloroethene) ClCHCCl2	X	X	X	ND	A	A	X	X	A	A	ND	X	ND	ND
Ethylhexyl Acetate CH3CO2CH2 • CH(C2H5)C4H9	ND	X	ND	ND	X	A	ND	ND	ND	ND	ND	ND	ND	ND
Ethylhexyl Alcohol (Ethylhexanol) C8H17OH	ND	A	ND	ND	B	A	ND	A	A	A	A	ND	ND	ND
Ethylidene Chloride CH3CHCl2	X	X	X	ND	ND	A	ND	X	B	A	B	ND	ND	ND
Fatty Acids CnH2n+1COOH	C	B	X	B	A	A	B	90%A	X	A	A	B	A	A
Ferric Chloride FeCl3	A	A	A	X	A	A	A	X	X	X	10%A	A	A	A
Ferric Hydroxide FeHO2	ND	B	ND	ND	C	A	ND	ND	ND	A	10%B	ND	ND	ND
Ferric Nitrate Fe(NO3)3	A	A	A	ND	A	A	A	X	X	B	10%A	A	A	A
Ferric Sulfate Fe2(SO4)3	A	A	A	ND	A	A	A	C	X	B	30%A	A	B	A
Ferrous Chloride FeCl2	A	A	A	X	A	A	A	X	X	30%B	50%B	A	B	A
Ferrous Sulfate FeSO4	A	A	A	A	A	A	A	10%A	C	B	30%A	A	B	A
Fish Oil	ND	A	ND	ND	A	A	B	ND	ND	ND	ND	ND	ND	ND
Fluoboric Acid (Fluoroboric Acid) HBF4	B	A	A	X	C	A	A	X	X	30%A	ND	A	ND	A

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CHEMICAL FORMULA	ELASTOMERS							METAL PARTS				PLASTICS		
	Neoprene	Nitrile	E.P.D.M.	Hytel	(FKM) Fluorocarbon	PTFE, PFA	Santoprene	Aluminum	Cast Iron / Steel	Stainless Steel	Alloy C (Hastelloy Equiv)	Polypropylene	Acetal	PVDF
Fluorine (Liquid) F2	C	X	C	X	B	A	X	A	ND	A	ND	X	ND	A ^{70°}
Fluorobenzene FC6H5	X	X	X	ND	A	A	C	ND	ND	ND	ND	X	ND	ND
Fluorolube (Fluorocarbon Oils) FxCyHz	A	C	A	ND	B	A	X	A	A	A	A	X	ND	ND
Fluosilicic Acid (Sand Acid) H2SiF6	A	B	B	B	A	A	A	X	X	ND	B	A	ND	A
Formaldehyde (Formalin) HCHO	C	B	A	40°C	A	A	B	A	C	90%A	70%A	A	A	A ^{120°}
Formamide HCONH2	A	A	A	ND	X	A	ND	A	B	B	B	ND	ND	ND
Formic Acid HCOOH	B	C	B	C	C	A	A	X	X	C	A	A ^{70°}	X	A
Freon 11 (Trichlorofluoromethane) CCl3F	C	C	X	A	B	A	X	B	A	A	ND	B	ND	A
Freon 113 (Trichlorotrifluoroethane) (TF) Cl3CCF3	A	B	X	A	B	A	X	B	ND	A	ND	ND	ND	A
Freon 114 (Dichlorotetrafluoroethane) C2Cl2F4	A	A	C	A	A	A	X	B	ND	A	ND	ND	ND	A
Freon 114B2 (Dibromotetrafluoroethane) C2Br2F4	A	B	X	ND	B	A	X	ND	ND	ND	ND	ND	ND	ND
Freon 115 (Chloropentafluoroethane) C2ClF5	A	A	A	ND	B	A	X	A	ND	ND	ND	ND	ND	ND
Freon 12 (Dichlorodifluoromethane) Cl2CF2	B	B	B	A	B	A	X	A	A	A	ND	ND	ND	A
Freon 13 (Chlorotrifluoromethane) ClCF3	A	A	A	C	A	A	X	A	A	A	A	ND	ND	ND
Freon 13B1 (Bromotrifluoromethane) BrCF3	A	A	A	ND	A	A	ND	ND	ND	ND	ND	ND	ND	ND
Freon 14 (Tetrafluoromethane) CF4	X	X	B	ND	ND	A	ND	ND	ND	ND	ND	ND	ND	ND
Freon 21 (Dichlorofluoromethane) FCHCl2	B	X	X	ND	X	A	X	A	ND	ND	ND	ND	ND	A
Freon 22 (Chlorodifluoromethane) HCClF2	B	X	C	X	X	A	X	A	A	A	A	ND	ND	A
Fruit Juices Water, sucrose	A	A	A	B	A	A	A	0%A	X	A	A	A	ND	A
Fuel Oils (ASTM #1 thru #9) Hydrocarbons	C	A	X	B	A	A	C	A	A	A	A	C	C	A
Fumaric Acid (Boletic Acid) HOOCCH = CHCOOH	B	C	ND	ND	A	A	A	ND	ND	ND	ND	ND	ND	ND

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CHEMICAL FORMULA	ELASTOMERS							METAL PARTS				PLASTICS		
	Neoprene	Nitrile	E.P.D.M.	Hytel	(FKM) Fluorocarbon	PTFE, PFA	Santoprene	Aluminum	Cast Iron / Steel	Stainless Steel	Alloy C (Hastelloy Equiv)	Polypropylene	Acetal	PVDF
Furan (Furfuran) C4H4O	X	X	X	X	C	A	C	ND	ND	ND	ND	C	ND	X
Furfural (Ant Oil) C5H4O2	B	X	B	ND	C	A	C	A	B	20%A	B	X	B	B ^{120°}
Furfuryl Alcohol C5H6O2	ND	X	B	B	X	A	ND	A	A	A	A	ND	ND	B ^{100°}
Fusel Oil (Grain Oil) (CH3)2 • CHCH2CH2OH	A	A	A	ND	A	A	ND	ND	ND	ND	ND	ND	ND	ND
Gallic Acid C6H2(OH)3 • COOH	C	B	B	X	A	A	B	20%A	X	B	B	A ^{70°}	ND	A ^{70°}
Gasoline (Petrol) Hydrocarbons	C	A	X	A	A	A	C	A	A	A	A	C	A	A
Gasoline (Unleaded) C4 to C12 • Hydrocarbons	X	X	X	ND	A	A	C	A	A	A	A	C	A	A
Gelatin Water soluble Proteins	A	A	A	B	B	A	A	A	A	A	ND	A	B	A
Ginger Oil C17H26O4	A	ND	ND	ND	A	A	C	ND	X	A	ND	ND	ND	ND
Glauber's Salt (Sodium Sulfate Decahydrate) Na2SO4•10H2O	A	A	B	B	A	A	ND	ND	ND	ND	ND	ND	ND	ND
Gluconic Acid C6H12O7	ND	C	ND	ND	A	A	ND	B	C	50%A	ND	A	ND	ND
Glucose (Corn Syrup) C6H12O6	A	A	A	B	A	A	A	A	A	A	ND	A	A	A
Glue (PVA)	A	A	B	B	A	A	A	A	A	B	A	A	B	ND
Glycerol (Glycerine) C3H8O3	A	A	A	A	A	A	A	A	B	A	A	A	A	A
Glycolic Acid HOCH2COOH	A	A	ND	ND	A	ND	A	ND	ND	ND	A	A	ND	A
Glycols	A	A	ND	ND	A	A	A	B	B	B	ND	A	A	A
Gold Monocyanide AuCN	A	A	ND	ND	A	ND	A	ND	ND	X	A	ND	ND	ND
Grape Juice Water, sucrose	X	C	ND	ND	A	A	A	ND	X	A	ND	A	ND	A
Grapefruit Oil	X	X	ND	ND	ND	A	ND	ND	X	A	ND	ND	ND	ND
Grease Hydrocarbons	X	A	ND	A	A	A	B	A	ND	A	ND	ND	ND	ND
Green Sulfate Liquor	B	B	A	X	A	A	A	B	C	A	B	A	ND	ND
Halowax Oil Chlorinated naphthalenes	X	X	X	ND	A	A	X	X	ND	ND	ND	ND	ND	ND
Heptanal CH3(CH2)5CHO	ND	A	ND	ND	A	ND	ND	A	A	A	A	A	ND	ND
Heptane C7H16	C	A	X	ND	A	A	C	A	A	A	A	C ^{140°}	A	A
<p style="text-align: center;">Data limited to % concentration and/or temperature °F shown. Where not shown temperature is 70°F (21°C) Ambient. RATING KEY: (A) Excellent (B) Good (C) Fair to Poor (X) Not Recommended (ND) No Data Available</p>														

CHEMICAL FORMULA	ELASTOMERS							METAL PARTS				PLASTICS		
	Neoprene	Nitrile	E.P.D.M.	Hytel	(FKM) Fluorocarbon	PTFE, PFA	Santoprene	Aluminum	Cast Iron / Steel	Stainless Steel	Alloy C (Hastelloy Equiv)	Polypropylene	Acetal	PVDF
Hexalin (Cyclohexanol) C6H11OH	A	B	C	ND	A	A	ND	ND	ND	ND	ND	ND	ND	ND
Hexanal CH3(CH2)4CHO	A	X	B	ND	C	A	ND	A	B	A	B	ND	ND	ND
Hexyl Alcohol (1-Hexanol) C6H13OH	B	B	C	ND	A	A	ND	A	A	A	A	A ^{70°}	ND	A
Hexylene Glycol (Brake Fluid) C6H12(OH)2	A	A	C	ND	A	A	ND	A	A	A	A	ND	ND	ND
Honey	A	ND	ND	ND	ND	A	A	A	A	A	ND	A	ND	ND
Hydraulic Oil (Petroleum Base) Hydrocarbons	B	A	X	X	A	A	X	A	A	A	A	X	C	ND
Hydrazine (Diamine) H2NNH2	C	C	A	X	X	A	A	A	X	A	A	X	B	X
Hydrobromic Acid HBr	C	X	A	ND	A	A	B	A	A	A	ND	B	X	A
Hydrochloric Acid 10% (Muratic) HCl	B	B	A	ND	A	A	A	X	C	X	B	A	X	A
Hydrochloric Acid 20% (Muratic) HCl	B	B	A	C	A	A	A	X	C	X	A	A	X	A
Hydrochloric Acid 30% (Conc.) HCl	C	C	A	X	B	A	ND	X	X	X	A	B	X	A
Hydrocyanic Acid (Formonitrile) HCN	C	B	A	X	A	A	B	10%A	X	A	B	A	X	A
Hydrofluoric Acid (Conc.) Cold HF *SEE NOTE BELOW	C	ND	C	X	B	A	X	C	X	X	B	40%A	X	A
Hydrogen Fluoride — Anhydrous HF	C	X	C	ND	A	A	ND	X	ND	X	A	A	ND	A
Hydrogen Peroxide — 10% H2O2	C	C	B	X	A	A	ND	A	B	A	A	A	ND	A
Hydrogen Peroxide — 3% H2O2	B	B	B	X	A	A	A	A	ND	ND	ND	A	ND	A
Hydrogen Peroxide — 30% H2O2	X	C	B	X	A	A	ND	A	X	B	A	A	ND	A
Hydrogen Peroxide — 90% H2O2	B	X	C	X	A	A	ND	A	X	A	ND	ND	ND	ND
Hydrogen Sulfide (Wet) H2S	C	X	A	A	X	A	A	90%A	X	A ^{167°}	A ^{167°}	A	C	A
Hydroquinone C6H4(OH)2	X	C	ND	ND	C	A	A	90%A	B	10%A	B	ND	ND	A
Hydroxyacetic Acid — 10% HOCH2COOH	X	X	ND	ND	ND	A	70%A	B	ND	B	ND	ND	ND	ND
Hypochlorous Acid HClO	X	X	B	ND	A	A	A	X	X	X	A	A	ND	A
Ink	A	ND	ND	A	ND	ND	C	X	A	A	ND	ND	ND	ND
Iodine I2	B	B	B	B	A	A	A	A	X	X	A	A	ND	A ^{150°}

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RATING KEY: (A) Excellent (B) Good (C) Fair to Poor (X) Not Recommended (ND) No Data Available

CHEMICAL FORMULA	ELASTOMERS							METAL PARTS				PLASTICS		
	Neoprene	Nitrile	E.P.D.M.	Hytel	(FKM) Fluorocarbon	PTFE, PFA	Santoprene	Aluminum	Cast Iron / Steel	Stainless Steel	Alloy C (Hastelloy Equiv)	Polypropylene	Acetal	PVDF
Iodoform CHI3	ND	ND	A	ND	ND	A	B	A	A	A	A	ND	ND	A
Isoamyl Acetate CH3CO2CH2CH2CH • (CH3)2	X	X	B	ND	X	A	ND	A	A	A	A	ND	ND	ND
Isoamyl Alcohol (CH3)2•CHCH2CH2OH	A	A	A	ND	A	A	ND	ND	ND	ND	ND	ND	ND	ND
Isoamyl Butyrate C9H18O2	ND	X	ND	ND	X	A	ND	A	A	A	A	ND	ND	ND
Isoamyl Chloride (CH3)2, CHCH2CH2Cl	X	X	X	ND	A	A	ND	X	ND	ND	ND	ND	ND	ND
Isobutyl Acetate CH3CO2CH2 • CH(CH3)2	X	X	C	ND	X	A	ND	A	A	A	A	ND	ND	ND
Isobutyl Alcohol (Isobutanol) (CH3)2CHCH2OH	A	B	A	ND	A	A	NR	A	A	A	A	A	A	A
Isobutyl Amine (CH3)2 • CHCH2NH2	ND	X	ND	ND	X	A	ND	ND	ND	ND	ND	ND	ND	ND
Isobutyl Chloride (CH3)2 • CHCH2Cl	ND	X	ND	ND	B	A	ND	X	B	B	90%A	ND	ND	ND
Isobutyric Acid (CH3)2 • CHCOOH	B	X	A	ND	ND	A	ND	A	ND	ND	ND	ND	ND	ND
Isododecane (CH3)2 • CH(CH2)8CH3	A	B	X	ND	A	A	ND	B	B	B	B	ND	ND	ND
Isooctane (Trimethylpentane) C8H18	B	A	X	A	A	A	C	A	A	A	A	A	ND	A
Isopentane (CH3)2, CHCH2CH3	ND	A	ND	ND	A	A	ND	ND	ND	ND	ND	ND	ND	ND
Isophorone C9H14O	X	X	C	ND	X	A	B	A	A	A	A	ND	ND	ND
Isopropyl Acetate CH3COOCH, (CH3)2	X	X	B	ND	X	A	B	A	A	A	A	B	ND	ND
Isopropyl Alcohol (Isopropanol) CH3CH(OH)CH3	B	B	B	A	A	A	A	A	A	A	A	A	A	A
Isopropyl Amine C3H7NH2	ND	X	ND	ND	X	A	ND	ND	A	A	ND	ND	ND	ND
Isopropyl Chloride (CH3)2CHCl	X	X	X	ND	B	A	C	X	A	A	A	X	ND	ND
Isopropyl Ether (CH3)2CHOCH • (CH3)2	C	C	X	ND	C	A	C	B	ND	A	ND	X	ND	A ^{70°}
Jet Fuels (JP1 to JP6) (ASTM-A, A1 & B)	C	A	X	A	A	A	C	A	A	A	A	X	A	A
Kerosine (Kerosene) Hydrocarbons	C	A	X	A	A	A	C	A	A	A	A	X	A	A
Lacquer Solvents	X	X	X	C	X	A	C	A	B	A	A	C	B	X
Lacquers	X	X	X	X	X	A	C	A	B	A	A	ND	B	ND
Lactic Acid CH3CHOH • COOH	B	B	A	X	A	A	A	A	X	70%A	60%A	A	C	A

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CHEMICAL FORMULA	ELASTOMERS							METAL PARTS				PLASTICS		
	Neoprene	Nitrile	E.P.D.M.	Hytrel	(FKM) Fluorocarbon	PTFE, PFA	Santoprene	Aluminum	Cast Iron / Steel	Stainless Steel	Alloy C (Hastelloy Equiv)	Polypropylene	Acetal	PVDF
Lactol (Aliphatic Naptha Solvent) CH3CHOH • CO2C10H7	X	C	ND	ND	A	A	ND	A	A	A	A	ND	ND	ND
Lard (Lard Oil) Olein, stearin	C	A	X	B	A	A	B	A	A	B	A	A	B	A
Latex Rubber emulsion	A	A	ND	ND	ND	A	ND	A	ND	A	ND	A	C	ND
Lauryl Alcohol (n-Dodecanol) CH3(CH2)10 • CH2OH	ND	A	ND	ND	B	ND	A	A	A	A	A	ND	ND	ND
Lavender Oil Ester mixture	X	B	X	ND	B	A	B	ND	ND	ND	ND	ND	ND	ND
Lead Acetate (Sugar of Lead) Pb(CH3CO2)2	A	B	A	ND	X	A	A	X	ND	B	B	A	A	A
Lead Chloride PbCl2	B	ND	ND	ND	ND	A	ND	X	ND	B	B	A	ND	A
Lead Nitrate Pb(NO3)2	A	B	A	ND	A	A	ND	X	B	B	B	A	ND	A
Lead Sulfamate	ND	A	B	ND	ND	ND	ND	A	ND	ND	ND	ND	A	ND
Lemon Oil (Cedro Oil) Hydrocarbons	ND	C	ND	ND	ND	ND	ND	C	A	ND	A	ND	ND	ND
Lignin Liquor (Blend of natural aromatic oils)	A	A	ND	ND	A	A	ND	ND	ND	A	ND	ND	ND	ND
Ligroin (Ligroine) (Benzene) Petroleum fraction	B	A	X	ND	A	A	B	ND	A	A	ND	X	ND	ND
Lime Bleach	C	A	A	ND	A	A	A	X	ND	ND	ND	B	ND	ND
Lime Slurries	A	B	ND	C	B	A	ND	B	ND	B	ND	ND	ND	ND
Lime Sulfur CaS+CaSO4	A	A	A	ND	A	A	B	X	ND	A	ND	A	ND	ND
Lime, Soda (Slaked Lime & Soda Ash) CaO	B	B	A	ND	B	A	A	ND	ND	ND	ND	ND	ND	ND
Limonene C10H16	X	C	X	ND	A	A	ND	ND	ND	ND	ND	ND	ND	ND
Lindol (Tritolyl Phosphate) C21H21O4P	C	X	ND	ND	B	A	A	ND	ND	ND	ND	ND	ND	ND
Linoleic Acid C18H32O2	X	B	X	ND	B	A	B	A	ND	A	A	A	ND	A
Linseed Oil (Flaxseed Oil) Glycerides	A	A	C	B	A	A	B	A	A	A	A	A	A	A
Lithium Bromide LiBrH2O	X	A	ND	ND	A	A	ND	ND	A	ND	ND	ND	ND	A
Lubricating Oils (Petroleum) Hydrocarbons	B ^{150°}	A	X	A	A	A	X	A	A	A	A	C	A	A
Lye (Potassium Hydroxide) KOH	B	C	ND	C	B	A	A	ND	ND	A	ND	A	X	A ^{150°}
Magnesium Carbonate MgCO3	A	A	C	A	A	A	A	A	B	B	B	A	A	A

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CHEMICAL FORMULA	ELASTOMERS							METAL PARTS				PLASTICS		
	Neoprene	Nitrile	E.P.D.M.	Hytel	(FKM) Fluorocarbon	PTFE, PFA	Santoprene	Aluminum	Cast Iron / Steel	Stainless Steel	Alloy C (Hastelloy Equiv)	Polypropylene	Acetal	PVDF
Magnesium Chloride MgCl2O	A	A	A	A	A	A	A	20%A	30%B	50%B	A	A	B	A
Magnesium Hydroxide (Milk of Magnesia) Mg(OH)2	B	B	A	C	A	A	A	10%A	A	A	A	A	A	A
Magnesium Nitrate Mg(NO3)2 • 6H2O	A	A	A	ND	A	A	A	50%B	B	A	B	A	ND	A
Magnesium Oxide MgO	A	A	ND	ND	B	A	A	10%A	A	A	A	ND	ND	ND
Magnesium Sulfate (Epsom Salts) MgSO4 • 7H2O	A	A	A	B	A	A	A	70%A	A	50%A	A	A	A	A
Maleic Acid (CHCOOH)2	A	X	X	ND	A	A	A	20%A	60%B	B	A	A	ND	A
Maleic Anhydride C4H2O3	ND	ND	X	ND	A	A	A	20%A	B	A	A	ND	ND	ND
Malic Acid (Apple Acid) C4H6O5	C	B	X	ND	A	A	A	B	ND	A	B ^{212°}	ND	ND	ND
Maple Sugar Liquors (Sucrose) Water, sucrose	A	A	A	ND	A	A	ND	ND	ND	A	ND	ND	ND	ND
Mayonnaise Water, fats, oils	A	A	ND	ND	ND	A	A	X	X	A	A	A	ND	ND
Mercuric Chloride HgCl2	B	A	A	ND	A	A	A	X	X	X	30%B	A	B	A
Mercuric Cyanide Hg(CN)2	B	B	A	ND	A	A	A	X	B	B	B	A	ND	A
Mercurous Nitrate Hg2(NO3)2 • 2H2O	B	B	A	ND	A	A	ND	X	B	B ^{212°}	B	A	ND	A
Mercury Hg	A	A	A	A	A	A	A	X	A	A	A	A	C	A
Mesityl Oxide (CH3)2C = CHCOCH3	X	X	B	ND	X	A	C	A	A	A	A	ND	ND	ND
Methane CH4	B	A	X	B	A	A	C	A	A	A	A	B	A	A
Methyl Acetate CH3CO2CH3	C	X	C	C	X	A	B	A	A	A	A	C	B	ND
Methyl Acetoacetate CH3COCH2 • COOCH3	ND	X	ND	ND	X	A	ND	ND	A	A	A	ND	ND	ND
Methyl Acrylate CH2CHCO2CH3	C	ND	C	ND	X	A	B	ND	A	A	ND	ND	ND	A ^{70°}
Methyl Acrylic Acid (Crotonic Acid) CH3(CH)2COOH	C	ND	C	ND	X	A	ND	ND	ND	ND	ND	ND	ND	ND
Methyl Alcohol (Methanol) CH3OH	A	A	A	A	X	A	A	A	A	A	A	A ^{70°}	A	A
Methyl Amine (Monomethylamine) CH3NH2	A	B	A	ND	90%A	A	ND	B	B	A	B	X	ND	C
Methyl Amyl Acetate C8H16O2	ND	A	ND	ND	X	A	ND	A	A	A	A	ND	ND	ND

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CHEMICAL FORMULA	ELASTOMERS							METAL PARTS				PLASTICS		
	Neoprene	Nitrile	E.P.D.M.	Hytrel	(FKM) Fluorocarbon	PTFE, PFA	Santoprene	Aluminum	Cast Iron / Steel	Stainless Steel	Alloy C (Hastelloy Equiv)	Polypropylene	Acetal	PVDF
Methyl Amyl Alcohol C6H13OH	ND	A	ND	ND	X	A	ND	A	A	A	A	ND	ND	ND
Methyl Aniline C6H5NH(CH3)	A	A	A	ND	ND	A	ND	ND	ND	ND	ND	ND	ND	ND
Methyl Bromide (Bromo Methane) CH3Br	X	C	A	X	A	A	X	X	A	A	B	X	ND	A
Methyl Butyl Ketone (2-hexanone) CH3COC4H9	X	X	B	ND	X	A	C	ND	ND	A	ND	X	ND	ND
Methyl Butyrate CH3(CH2)2 • CO2CH3	X	X	X	ND	ND	A	ND	A	A	A	A	ND	ND	ND
Methyl Cellosolve® CH3OCH2 • CH2OH	X	X	ND	ND	X	A	B	A	ND	ND	ND	A	ND	A
Methyl Chloride CH3Cl	X	X	C	X	B	A	X	X	A	A	A	X	B	A
Methyl Cyclopentane C6H12	X	B	X	ND	A	A	C	ND	ND	A	ND	ND	ND	ND
Methyl Dichloride CH2Cl2	X	X	ND	ND	A	ND	X	X	ND	ND	ND	X	ND	ND
Methyl Ethyl Ketone (Butanone) CH3CO • CH2CH3	X	X	A	C	X	A	B	A	A	A	A	X	B	X
Methyl Formate HCOOCH3	B	X	C	ND	X	A	B	A	A	A	ND	ND	ND	ND
Methyl Hexane C7H16	A	A	X	ND	A	A	ND	ND	ND	ND	ND	ND	ND	ND
Methyl Iodide CH3I	X	X	A	ND	ND	A	ND	X	A	A	A	ND	ND	ND
Methyl Isobutyl Ketone (Hexone) CH3COCH2CH • (CH3)2	X	X	C	X	X	A	C	A	B	B	A	C ^{70°}	A	A ^{70°}
Methyl Isopropyl Ketone CH3COCH(CH3)2	X	X	C	X	X	A	C	ND	ND	A	ND	C	ND	A ^{70°}
Methyl Methacrylate CH2C(CH3) • CO2CH3	X	X	X	ND	C	A	B	B	ND	A	ND	ND	ND	A ^{70°}
Methyl Oleate C19H36O2	X	X	C	ND	B	A	C	ND	ND	ND	ND	ND	ND	ND
Methyl Propyl Ketone CH3CH2 • CH2COCH3	X	X	B	ND	X	A	ND	ND	ND	ND	ND	ND	ND	ND
Methyl Salicylate (Betula Oil) HOC6H4 • COOCH3	X	X	C	ND	B	A	B	A	A	ND	ND	ND	ND	ND
Methacrylic Acid CH3CHCHCO2H	B	ND	ND	ND	B	A	A	ND	ND	ND	ND	ND	ND	ND
Methylamine CH3NH2	A	B	A	ND	^{90%} A	A	A	B	B	A	B	A	ND	ND
Methylene Bromide CH2Br2	X	X	ND	ND	B	A	ND	X	A	A	A	ND	ND	A
Methylene Chloride CH2Cl2	X	X	X	X	B	A	X	X	B	^{90%} A	A	X	ND	B ^{100°}

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CHEMICAL FORMULA	ELASTOMERS							METAL PARTS				PLASTICS		
	Neoprene	Nitrile	E.P.D.M.	Hytrel	(FKM) Fluorocarbon	PTFE, PFA	Santoprene	Aluminum	Cast Iron / Steel	Stainless Steel	Alloy C (Hastelloy Equiv)	Polypropylene	Acetal	PVDF
Milk	A	B	A	B	A	A	A	A	X	A	A	A	A	A
Mine Water	ND	A	ND	ND	ND	A	ND	B	ND	B	A	ND	ND	ND
Mineral Oil (Petroleum) Hydrocarbons	B	A	X	A	A	A	C	A	A	A	A	B	A	A
Mixed Acids (Sulfuric & Nitric) H2SO4, HNO3	X	X	B	ND	A	A	ND	X	X	B	B	X	ND	A
Molasses	A	A	A	B	A	A	A	A	A	A	A	A	B	A
Monochlorobenzene C6H5Cl	X	X	ND	C	A	A	C	X	A	A	ND	X	A	A ^{100°}
Monoethanolamine NH2C2H4OH	C	B	ND	ND	C	A	A	B	A	A	ND	X	X	X
Mustard	A	C	ND	B	X	A	A	B	X	A	A	A	A	ND
N,N-Dimethyl Formamide (DMF) HCON(CH3)2	X	C	ND	C	X	A	A	A	ND	A	A	A ^{120°}	B	A ^{120°}
N,N-Dimethylaniline C6H5N(CH3)2	X	X	C	ND	X	A	B	B	B	ND	ND	X	ND	A
n-Amyl Amine (1-Aminopentane) CH3(CH2)4NH2	X	C	X	ND	X	A	ND	ND	ND	ND	ND	ND	ND	ND
Naphtha (Petroleum Spirits) (Thinner) Petroleum fractions	X	A	X	A	A	A	C	A	B	A	A	X	A	A
Naphtha Coal Tar (Benzol) Hydrocarbons	X	X	X	ND	A	A	ND	A	B	A	A	ND	ND	ND
Naphthalene (Tar Camphor) C10H8	X	X	X	C	A	A	C	B	A	A	A	A	A	A
Naphthoic Acid C11H8O2	ND	B	X	ND	A	A	ND	B	B	A	B	ND	ND	ND
n-Butyl Acetate CH3CO2(CH2)3CH3	X	X	X	ND	X	A	A	A	A	A	A	ND	ND	ND
Neatsfoot Oil	ND	A	C	ND	A	A	B	ND	ND	A	ND	ND	ND	ND
Neohexane (2,2-dimethylbutane) C6H14	ND	A	ND	ND	A	A	ND	ND	ND	ND	ND	ND	ND	ND
Neosol	A	A	B	ND	C	A	ND	B	B	A	A	ND	ND	ND
Neville Acid	C	C	C	ND	B	A	A	ND	ND	ND	ND	ND	ND	ND
n-Hexane C6H14	B	A	X	A	A	A	A	A	A	A	A	C ^{140°}	C	A
n-Hexane 1 (Hexylene) H2CCH(CH2)3CH3	B	A	X	ND	A	A	C	ND	ND	ND	ND	ND	ND	ND
Nickel Acetate Ni(CH3CO2)2	B	B	A	ND	X	A	A	10%B	ND	A	ND	A	ND	A
Nickel Chloride NiCl2	A	A	A	X	A	A	A	X	X	B	80%A ^{200°}	A	B	A
Nickel Nitrate Ni(NO3)2 • 6H2O	A	A	A	ND	A	A	ND	X	ND	A	B	A	ND	A

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CHEMICAL FORMULA	ELASTOMERS							METAL PARTS				PLASTICS		
	Neoprene	Nitrile	E.P.D.M.	HytreI	(FKM) Fluorocarbon	PTFE, PFA	Santoprene	Aluminum	Cast Iron / Steel	Stainless Steel	Alloy C (Hastelloy Equiv)	Polypropylene	Acetal	PVDF
Nickel Sulfate NiSO4	A	A	A	ND	A	A	A	X	X	40%A	B	A	A	A
Nitrana (Ammonia Fertilizer)	B	B	ND	ND	C	A	ND	ND	ND	A	ND	ND	ND	ND
Nitric Acid — 10% HNO3	B	X	B	C	A	A	A	A	X	A	A	A	ND	A
Nitric Acid — 25% HNO3	C	X	B	X	A	A	20%B	X	X	30%A	30%A	A	ND	A
Nitric Acid — 35% HNO3	X	X	C	X	A	A	ND	X	X	50%A	50%A	B	ND	A
Nitric Acid — 70% HNO3	X	X	X	X	A	A	ND	ND	X	A	X	ND	ND	A
Nitric Acid (Conc.) HNO3	X	X	X	X	B	A	C	A	X	A	40%A	X	ND	A ^{120°}
Nitric Acid (Red Fuming)	X	X	X	X	B	A	X	A	X	A	B	X	ND	C
Nitric Acid —50% HNO3	X	X	X	X	A	A	C	X	X	A	X	C	ND	A
Nitrobenzene C6H5NO2	X	X	X	X	B	A	B	A	A	A	55%B ^{212°}	B	B	A ^{70°}
Nitroethane C2H5NO2	C	X	C	ND	X	A	A	A	A	A	A	C	ND	A ^{70°}
Nitrogen Tetroxide N2O4	X	X	X	50%B	C	A	ND	A	B	A	A	X	ND	C
Nitromethane CH3NO2	C	X	C	X	X	A	A	A	A	A	A	C	A ^{120°}	B
N-Methyl Aniline C6H5NHCH3	X	X	ND	ND	C	A	ND	ND	ND	ND	ND	C	ND	ND
n-Octane C8H18	ND	A	X	ND	A	A	B	ND	ND	ND	ND	X	ND	A
n-Propyl Acetate CH3COO • (CH2)2CH3	X	X	A	ND	X	A	B	A	ND	A	A	C	ND	A
n-Propyl Nitrate (NPN) CH3(CH2)2NO3	ND	A	B	ND	C	A	B	A	X	ND	ND	ND	ND	ND
o-Chlorophenol C6H5ClO	X	X	X	ND	B	A	ND	B	B	B	B	ND	B	A
Octachlorotoluene C7Cl8	X	X	ND	ND	A	A	ND	X	ND	ND	ND	X	ND	ND
Octadecane CH3(CH2)16CH3	B	A	X	ND	A	A	B	ND	ND	ND	ND	ND	ND	ND
Octyl (Caprylic Alcohol) C8H17OH	A	B	ND	ND	A	A	B	A	ND	A	A	A	ND	B
Octyl Acetate CH3COO • (CH2)7CH3	ND	X	ND	ND	X	A	ND	A	ND	A	ND	ND	ND	ND
o-Dichlorobenzene C6H4Cl2	X	X	X	X	A	A	X	X	B	B	A	B	ND	A ^{150°}
o-Dichlorobenzene C6H4Cl2	X	X	ND	ND	A	A	X	X	A	A	ND	X	ND	ND

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CHEMICAL FORMULA	ELASTOMERS							METAL PARTS				PLASTICS		
	Neoprene	Nitrile	E.P.D.M.	Hytel	(FKM) Fluorocarbon	PTFE, PFA	Santoprene	Aluminum	Cast Iron / Steel	Stainless Steel	Alloy C (Hastelloy Equiv)	Polypropylene	Acetal	PVDF
Oleic Acid (Red Oil) C18H34O2	X	C	C	A	B	A	ND	A	C	B	A	B	B	A
Olein (Triolene) C57H104O6	C	B	ND	ND	ND	A	ND	ND	ND	ND	ND	ND	ND	ND
Oleum (Fuming Sulfuric Acid) H2SO4/SO3	X	C	ND	X	A	A	X	X	X	A	ND	X	ND	X
Olive Oil	C	A	C	ND	A	A	B	A	A	A	A	A	A	A
Oxalic Acid (Mixed glycerides of acids) (COOH)2	B	C	A	X	C	A	A	B	X	90%B	B	A	X	A ^{120°}
Ozone O3	B	X	A	C	A	A	A	10%A	0%A	A	A	X	C	A
Paint Thinner, DUCO Hydrocarbons	C	A	X	ND	B	A	C	X	ND	A	A	X	ND	ND
Paints & Solvents	X	X	ND	ND	ND	A	ND	X	ND	A	A	ND	ND	ND
Palm Oil Mixture of terpenes	C	A	ND	ND	A	A	B	ND	A	A	A	ND	ND	ND
Palmitic Acid CH3(CH2)14 COOH	C	B	B	A	B	A	B	B	B	A	ND	A	ND	A
Paraffins (Paraffin Oil) Hydrocarbons	ND	A	ND	ND	ND	A	A	A	ND	A	A	A	A	ND
Paraformaldehyde (CH2O)n	B	B	ND	ND	C	A	ND	10%A	A	A	A	ND	ND	ND
Paraldehyde C6H12O3	B	C	A	ND	X	A	ND	A	A	A	A	ND	ND	ND
Peanut Oil Glycerides of fatty acids	B	A	X	ND	A	A	B	ND	A	A	A	A ^{70°}	ND	A
Pentachloroethane (Pentalin) Cl2 • CHCCl3	X	X	ND	ND	A	A	ND	X	A	A	A	ND	ND	ND
Pentachlorophenol (PCP) C6Cl5OH	X	X	X	ND	A	A	ND	A	A	A	A	ND	ND	ND
Pentane (Amyl Hydride) C5H12	B	A	X	B	A	A	A	A	B	B	ND	ND	ND	ND
Peppermint Oil	X	X	ND	ND	A	A	C	ND	ND	A	ND	ND	ND	ND
Perchloric Acid HClO4	B	X	B	X	A	70%A	C	X	X	B	ND	ND	C	A
Perchloroethylene (Tetrachloroethylene) C2Cl4	X	X	X	X	A	A	X	X	B	90%A	B	X	A	A
Petroleum (Crude Oil) (Sour) Hydrocarbons	C	B	X	C	A	A	ND	B	B	A	A	X	A	A
Phenethyl Alcohol (Benzyl Carbinol) C6H5(CH2)2OH	X	X	B	ND	X	A	ND	A	A	A	A	ND	ND	ND
Phenol (Carbolic Acid) C6H5OH	C	X	C	X	A	A	A	B	A	B	A	C	X	A ^{100°}
<p style="text-align: center;">Data limited to % concentration and/or temperature °F shown. Where not shown temperature is 70°F (21°C) Ambient. RATING KEY: (A) Excellent (B) Good (C) Fair to Poor (X) Not Recommended (ND) No Data Available</p>														

CHEMICAL FORMULA	ELASTOMERS							METAL PARTS				PLASTICS		
	Neoprene	Nitrile	E.P.D.M.	HytreI	(FKM) Fluorocarbon	PTFE, PFA	Santoprene	Aluminum	Cast Iron / Steel	Stainless Steel	Alloy C (Hastelloy Equiv)	Polypropylene	Acetal	PVDF
Phenyl Acetate CH3COOC6H5	X	X	B	ND	X	A	ND	ND	ND	ND	ND	ND	ND	ND
Phenyl Ethyl Ether (Phenetole) C6H5OC2H5	X	X	X	ND	C	A	C	ND	ND	ND	ND	ND	ND	ND
Phenyl Hydrazine C6H5NHNH2	X	X	X	ND	A	A	B	A	X	ND	ND	X	ND	A ^{120°}
Phenyl Sulfonic Acid C6H4(OH)SO3H	ND	X	ND	ND	X	A	ND	B	B	B	ND	ND	ND	ND
Phenylbenzene C6H5	X	X	ND	ND	A	A	C	ND	ND	ND	ND	ND	ND	ND
Phorone (Diisopropylidene Acetone) C9H14O	X	X	C	ND	A	A	B	ND	ND	ND	ND	ND	ND	ND
Phosphoric Acid — 10% H3PO4	B	A	A	ND	A	A	A	X	X	A	ND	A ^{120°}	ND	A
Phosphoric Acid — 20% H3PO4	B	C	A	ND	A	A	A	X	X	A ^{212°}	A	A ^{120°}	ND	A
Phosphoric Acid — 50% H3PO4	B	X	B	ND	A	A	45%B	X	X	A	C	A ^{120°}	ND	A
Phosphoric Acid (Conc.) H3PO4	B	X	B	X	A	A	ND	X	X	A ^{212°}	ND	A ^{120°}	ND	A
Phosphorus Oxychloride POCl3	X	ND	ND	ND	ND	A	ND	B	B	B	B	ND	ND	ND
Phosphorus Trichloride PCl3	X	X	A	ND	A	A	B	C	B	A	A	X	ND	A
Photographic Developer	A	A	ND	X	A	ND	A	C	X	A	A	A	C	A
Pickling Solution	X	ND	X	ND	B	A	A	ND	ND	ND	A	ND	ND	ND
Picric Acid (Carbazotic Acid) (NO2)3 • C6H2OH	B	B	B	X	A	A	B	A	C	A	B	B	ND	A
Pine Oil (Yarmor) Cyclic terpene alcohols	X	B	X	ND	A	A	C	A	B	A	ND	ND	ND	ND
Pinene C10H16	X	B	X	ND	A	A	C	ND	ND	ND	ND	ND	ND	ND
Piperidine C5H11N	X	X	X	ND	X	A	B	ND	ND	ND	ND	ND	ND	ND
Plating Solution — Cadmium	ND	B	B	ND	ND	ND	ND	A	ND	ND	A	ND	X	ND
Plating Solution — Chrome	X	X	C	ND	A	A	A	ND	ND	ND	ND	A ^{131°}	X	ND
Plating Solution — Lead	B	B	ND	ND	ND	A	A	ND	ND	ND	ND	ND	A	ND
Plating Solution — Others	C	A	A	ND	B	A	A	ND	ND	A	ND	ND	ND	ND
Polyvinyl Acetate Emulsion PVAc + H2O	C	ND	A	ND	ND	A	A	ND	B	ND	ND	ND	ND	A
Potassium Acetate CH3CO2K	B	B	A	ND	X	A	A	10%B	A	B	B	A	ND	A
Potassium Bicarbonate KHCO3	A	A	ND	ND	A	A	A	B	50%B	30%A	50%B	A	ND	A
Data limited to % concentration and/or temperature °F shown. Where not shown temperature is 70°F (21°C) Ambient. RATING KEY: (A) Excellent (B) Good (C) Fair to Poor (X) Not Recommended (ND) No Data Available														

Chemical Formula	Elastomers							Metal Parts				Plastics		
	Neoprene	Nitrile	E.P.D.M.	Hytel	(FKM) Fluorocarbon	PTFE, PFA	Santoprene	Aluminum	Cast Iron / Steel	Stainless Steel	Alloy C (Hastelloy Equiv)	Polypropylene	Acetal	PVDF
Potassium Bisulfate KHSO4	A	A	ND	ND	A	A	ND	10%A	X	10%A	ND	A	ND	A
Potassium Bisulfite KHSO3	A	A	ND	ND	A	A	ND	10%B	ND	10%B	90%B	ND	ND	ND
Potassium Bromide KBr	A	A	A	ND	A	A	A	A	80%B ^{212°}	90%B ^{212°}	70%A ^{167°}	A	ND	A
Potassium Carbonate (Potash) K2CO3	A	A	A	ND	A	A	A	X	B	B	90%A	A	B	A
Potassium Chlorate KClO3	A	A	A	ND	A	A	A	X	B	60%A	20%A	A	B	A
Potassium Chloride KCl	A	A	A	ND	A	A	A	X	B	A	30%A ^{167°}	A	B	A
Potassium Chromate K2CrO4	A	A	ND	ND	50%A	A	A	A	A	A	ND	A	ND	A
Potassium Copper Cyanide K3[Cu(CN)4]	A	A	A	ND	A	A	ND	ND	ND	ND	ND	A	ND	A
Potassium Cyanide KCN	A	A	A	ND	A	A	A	C	B	90%B ^{212°}	30%B	A	C	A
Potassium Dichromate K2Cr2O7	A	A	A	ND	A	A	A	A	A	A	25%B	A	C	A
Potassium Hydroxide (Caustic Potash) (Lye) KOH	B	B	A	C	B	A	A	X	B	A	50%B	A	C	A ^{150°}
Potassium Iodide KI	A	A	A	ND	A	A	ND	10%B	ND	B	B	A	ND	A
Potassium Nitrate (Saltpeter) KNO3	A	A	A	ND	A	A	A	80%A	B	80%B ^{212°}	80%B ^{212°}	A	B	A
Potassium Nitrite KNO2	A	A	A	B	A	A	ND	B	B	B	B	ND	ND	ND
Potassium Permanganate (Purple Salt) KMnO4	C	C	A	X	B	A	A	10%A	B	30%B ^{212°}	A	B	A	A
Potassium Phosphate KH2PO4	A	A	A	ND	A	A	ND	X	X	30%B	10%B	ND	ND	ND
Potassium Silicate K2Si2O5	A	A	A	ND	A	A	ND	B	B	B	B	ND	ND	ND
Potassium Sulfate K2SO4	A	A	A	B	A	A	A	B	B	A	A	A	B	A
Potassium Sulfide K2S	A	A	A	ND	A	A	ND	X	B	B	10%B	A	ND	A
Potassium Sulfite K2SO3·2H2O	A	A	A	ND	A	A	ND	A	X	50%B	ND	A	ND	A
Propane (LPG) C3H8	B	A	X	B	A	A	C	A	A	A	A	X	A	A
Propionaldehyde (Propanal) C2H5CHO	ND	X	ND	ND	X	A	ND	A	A	A	A	ND	ND	ND
Data limited to % concentration and/or temperature °F shown. Where not shown temperature is 70°F (21°C) Ambient. RATING KEY: (A) Excellent (B) Good (C) Fair to Poor (X) Not Recommended (ND) No Data Available														

CHEMICAL FORMULA	ELASTOMERS							METAL PARTS				PLASTICS		
	Neoprene	Nitrile	E.P.D.M.	Hytrel	(FKM) Fluorocarbon	PTFE, PFA	Santoprene	Aluminum	Cast Iron / Steel	Stainless Steel	Alloy C (Hastelloy Equiv)	Polypropylene	Acetal	PVDF
Propionic Acid (Methylacetic Acid) CH3CH2CO2H	X	X	A	ND	X	A	ND	A	X	B	90%A	ND	ND	ND
Propyl Alcohol (1-Propanol) C3H7OH	A	A	A	ND	A	A	A	A	A	A	A	A	A	A
Propylene C3H6	X	X	X	ND	A	A	B	A	A	A	A	ND	ND	ND
Propylene Dichloride CH3CH(Cl)CH2Cl	X	X	X	ND	B	A	ND	X	A	A	B	ND	ND	ND
Propylene Glycol (Methyl Glycol) C3H6(OH)2	C	A	A	ND	A	A	A	A	A	A	A	A	A	A
Propylene Oxide C3H6O	X	ND	C	ND	X	A	A	B	B	A	ND	X	ND	X
Pydraul (Phosphate Eser Base Fluid)	X	X	B	A	A	A	A	ND	A	A	A	ND	ND	ND
Pyranol	X	A	ND	ND	A	A	ND	ND	ND	ND	ND	ND	ND	ND
Pyridine N(CH)4CH	X	X	C	X	X	A	A	A	B	A	50%A ^{100°}	C	A	X
Pyroligneous Acid (Wood Vinegar)	C	C	C	ND	A	A	ND	B	X	10%A	ND	A	X	A
Pyrrole (Azole) C4H5N	X	X	X	ND	C	A	C	ND	ND	ND	ND	ND	ND	ND
Quaternary Ammonium Salts NH4 (X)	A	A	ND	ND	A	A	ND	ND	X	A	ND	ND	ND	ND
Quench Oil	B	B	ND	ND	A	A	ND	A	ND	A	A	ND	ND	ND
Rape-Seed Oil (Colza Oil)	C	B	A	ND	A	A	B	ND	A	A	A	ND	ND	ND
Rose Oil Geraniol, citronellol	C	ND	ND	ND	A	A	A	ND	ND	A	ND	ND	ND	ND
Rosin C20H30O2	C	A	ND	ND	ND	A	A	A	ND	A	A	A	B	ND
Rosin Oil (Rosinol)	A	A	ND	ND	A	A	ND	ND	ND	ND	ND	ND	ND	ND
Rotenone C23H22O6	A	A	A	ND	A	A	ND	ND	ND	ND	ND	ND	ND	ND
Rubber Latex Emulsions (C5H8)n/H2O	ND	ND	ND	ND	A	A	ND	A	ND	A	A	ND	ND	ND
Rubber Solvents (Petroleum Distillate) Hydrocarbons	C	X	ND	ND	X	A	ND	A	ND	A	A	ND	ND	ND
Rum Alcoholic liquor from molasses	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Rust Inhibitors	C	A	ND	ND	A	ND	B	ND	ND	A	ND	A	ND	ND
Sal Ammoniac (Ammonium Chloride) NH4Cl	A	A	A	A	A	A	A	X	X	B	A	A	X	A
Sal Soda (Sodium Carbonate) NaCO3	A	A	A	ND	A	A	ND	X	A	A	A	ND	ND	ND
Salad Dressing Fats, oils, water	ND	A	ND	ND	A	ND	A	B	X	A	ND	A	ND	ND
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CHEMICAL FORMULA	ELASTOMERS							METAL PARTS				PLASTICS		
	Neoprene	Nitrile	E.P.D.M.	Hytel	(FKM) Fluorocarbon	PTFE, PFA	Santoprene	Aluminum	Cast Iron / Steel	Stainless Steel	Alloy C (Hastelloy Equiv)	Polypropylene	Acetal	PVDF
Salicylic Acid HOC6 • H4COOH	B	B	A	ND	B	A	ND	A	X	B	A	A	ND	A
Salt Water (Brine) NaCl/H2O	B	A	A	A	A	A	A	B	X	A	A	A	ND	A
Sea Water (Brine)	B	A	A	X	A	A	A	A	C	A	A	A	A	A
Sesame Seed Oil Olein, stearin, palmitin	C	A	ND	ND	A	A	B	ND	A	A	ND	ND	ND	ND
Sewage	B	A	C	B	A	A	A	B	B	A	A	A	ND	A
Silicate Esters Si(OR)4	A	B	X	C	A	A	B	ND	ND	ND	ND	ND	ND	ND
Silicone Oils (Versilube Etc.) (CH3)2SiO2]n	C	A	A	A	A	A	C	B	B	A	A	A	ND	A
Silver Cyanide AgCN	A	ND	ND	ND	ND	A	ND	X	A	A	A	A	ND	A
Silver Nitrate AgNO3	A	B	A	ND	A	A	A	X	X	60%A	60%A	A	A	A
Skydrol Hydraulic Fluid®	X	X	A	A	C	A	B	ND	ND	A	A	ND	ND	ND
Soap Solutions (Phosphate Ester Base) Salt of fatty acid in H2O	B	A	A	A	A	A	A	C	X	A	A	A	A	A
Soda Ash (Sodium Carbonate) Na2CO3	A	A	A	B	A	A	A	X	A	A	A	ND	ND	ND
Sodium Acetate CH3COONa	C	C	A	ND	X	A	A	A	A	A	A	A	A	A
Sodium Aluminate Na2Al2O4	A	A	ND	ND	A	A	A	ND	50%A	50%A	10%B	A	ND	A
Sodium Bicarbonate (Baking Soda) NaHCO3	A	A	A	B	A	A	A	B	C	20%A	20%A	A	X	A
Sodium Bisulfite (Cream of Tartar) NaHSO3	A	C	A	B	A	A	A	B	20%B	50%A	B	A	X	A
Sodium Bisulfite (Niter Cake) NaHSO4	A	A	A	B	A	A	A	50%B	C	50%B	B	A	C	A
Sodium Borate Na2B4O7	A	A	A	B	A	A	A	B	ND	A	A	A ^{140°}	C	A
Sodium Bromide NaBr	ND	ND	ND	ND	ND	A	ND	C	C	30%B	50%B	A	ND	A
Sodium Chlorate NaClO3	B	A	A	ND	A	A	A	70%B ^{212°}	B	B	70%B ^{212°}	A	B	A
Sodium Chloride (Table Salt) NaCl	A	A	A	A	A	A	A	B	30%B	A	A	A	A	A
Sodium Chromate Na2CrO4	A	A	ND	A	A	A	80%A ^{212°}	60%A	60%A	60%A	A	ND	A	A
Sodium Cyanide NaCN	A	A	A	A	A	A	A	X	A	A	ND	A	C	A
<p>Data limited to % concentration and/or temperature °F shown. Where not shown temperature is 70°F (21°C) Ambient. RATING KEY: (A) Excellent (B) Good (C) Fair to Poor (X) Not Recommended (ND) No Data Available</p>														

CHEMICAL FORMULA	ELASTOMERS							METAL PARTS				PLASTICS		
	Neoprene	Nitrile	E.P.D.M.	HytreI	(FKM) Fluorocarbon	PTFE, PFA	Santoprene	Aluminum	Cast Iron / Steel	Stainless Steel	Alloy C (Hastelloy Equiv)	Polypropylene	Acetal	PVDF
Sodium Dichromate (Sodium Bichromate) Na2Cr2O7 • 2H2O	B	ND	A	20% X	A	A	ND	ND	ND	ND	ND	A	ND	A
Sodium Fluoride NaF	A	A	A	ND	A	A	ND	30% B	ND	10% B	10% B	A	ND	A
Sodium Hexametaphosphate (Calgon) (NaPO3)6	B	B	B	ND	A	A	ND	C	B	B	A	ND	ND	ND
Sodium Hydroxide (Caustic Soda) (Lye) NaOH	B	B	A	X	X	A	50% A	X	50% B	50% A	70% B 212°	A	X	A
Sodium Hypochlorite NaClO	B	X	C	5% A	B	A	20% A	X	X	X	10% B	X	X	A
Sodium Metaphosphate (Kurul's Salt) Na(PO3)H	C	B	A	ND	A	A	A	X	ND	B	A	X	B	ND
Sodium Metasilicate Na2SiO3	A	A	ND	ND	A	ND	A	B	ND	A	A	A	B	A
Sodium Nitrate (Chile Saltpeter) NaNO3	B	C	A	B	A	A	A	90% A	90% A	90% A	30% A	A	A	A
Sodium Nitrite NaNO2	X	A	ND	ND	A	A	ND	A	A	A	A	A	ND	A
Sodium Perborate NaBO3	B	C	A	B	A	A	A	X	10% B	A	10% B	A	B	A
Sodium Peroxide (Sodium Dioxide) Na2O2	B	B	B	B	A	A	B	10% B	90% A	10% B	10% B	B	X	A
Sodium Phosphate (Tribasic) (TSP) Na3PO4	B	B	A	B	A	A	A	X	B167°	B	A	A	ND	A
Sodium Silicates (Water Glass) Na2O • SiO2	A	A	A	A	A	A	A	A	A	A	B	A	ND	A
Sodium Sulfate (Salt Cake) (Thenardite) Na2SO4	B	A	A	A	A	A	A	30% B	B	A	A	A	ND	A
Sodium Sulfide (Pentahydrate) Na2S • 5H2O	A	A	A	A	A	A	A	30% A 212°	B	30% A 167°	50% B 212°	A	A	A
Sodium Sulfite Na2SO3	A	A	A	A	A	A	ND	30% A	X	30% A	30% B 212°	A	A	A
Sodium Tetraborate Na2B4O7 • 10H2O	ND	ND	A	ND	B	ND	ND	A	ND	ND	A	ND	C	ND
Sodium Thiosulfate (Antichlor) Na2S2O3	A	A	A	ND	A	A	ND	A	C	A122°	B122°	A	B	A
Sorghum	ND	A	A	ND	ND	ND	ND	A	ND	A	A	A	ND	ND
Soy Sauce Fermented soya bean/wheat	ND	A	A	ND	ND	ND	ND	A	ND	X	A	ND	ND	ND
Soybean Oil Triglycerides of acids	C	A	A	C	A	A	A	B	A	A	A	A	B	B
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CHEMICAL FORMULA	ELASTOMERS							METAL PARTS				PLASTICS		
	Neoprene	Nitrile	E.P.D.M.	Hytel	(FKM) Fluorocarbon	PTFE, PFA	Santoprene	Aluminum	Cast Iron / Steel	Stainless Steel	Alloy C (Hastelloy Equiv)	Polypropylene	Acetal	PVDF
Sperm Oil (Whale Oil) Fatty acid esters	X	A	ND	ND	A	A	B	ND	A	A	A	ND	ND	ND
Stannic Chloride (Tin Chloride) SnCl4	B	A	B	B	A	A	A	X	C	10%A	B	A	ND	A
Stannous Chloride (Tin Chloride) SnCl2	A	A	B	15%B	A	A	ND	X	B	10%A	A	A	ND	A
Starch *SEE NOTE BELOW C6H10O5	A	A	B	B	C	A	A	A	C	A	A	A	B	ND
Stearic Acid CH3(CH2)16 CO2H	B ^{158°}	B	B	B	A	A	B	C	C	A	B	A	C	A
Stoddard Solvent Petroleum distillate	C	A	X	A	ND	A	C	A	A	A	X	A	A	X
Styrene (Vinylbenzene) C6H5CHCH2	X	X	X	X	A	A	C	A	A	A	A	ND	ND	A
Sucrose Solution (Sugar) C12H22O11/H2O	A	A	A	A	A	A	A	A	A	A	A	ND	ND	ND
Sulfamic Acid H2NSO3H	A	B	ND	A	ND	A	ND	10%A	X	X	ND	X	ND	X
Sulfate Dodecahydrate) KAl(SO4)2•12H2O	A	A	A	ND	X	A	A	ND	ND	B	B	A	ND	A
Sulfite Liquors	ND	B	A	C	B	ND	ND	A	ND	ND	ND	A	ND	ND
Sulfur S	B	B	X	A	A	A	ND	A	A	A	A	B	A	A
Sulfur Chloride S2Cl2	X	C	X	C	A	A	X	B	X	B	A	X	ND	A
Sulfur Dioxide SO2	A	X	B	X	A	A	A	A	B	10%A	80%A	A	B	A
Sulfur Hexafluoride SF6	A	B	A	A	A	A	B	ND	ND	ND	ND	ND	ND	ND
Sulfur Trioxide SO3	C	C	C	X	A	A	C	B	B	B	B	X	ND	X
Sulfuric Acid (Conc.) H2SO4	X	X	C	ND	A	A	98%B	X	B	B	A	X	ND	A ^{120°}
Sulfuric Acid (Fuming) H2SO4	X	X	X	X	B	A	ND	C	X	B	B	ND	ND	ND
Sulfuric Acid 10% H2SO4	A	B	A	A	A	A	A	X	X	A	A	A	ND	A
Sulfuric Acid 25% H2SO4	B	C	B	A	A	A	A	X	X	B	A	A	ND	A ^{150°}
Sulfuric Acid 50% H2SO4	B	C	B	A	A	A	A	X	X	X	A	A	ND	A ^{150°}
Sulfuric Acid 60% H2SO4	C	X	B	X	A	A	A	X	X	X	A	A	ND	A ^{150°}
Sulfuric Acid 75% H2SO4	X	X	C	X	A	A	A	X	C	C	A	A	ND	A ^{150°}
<p style="text-align: center;">Data limited to % concentration and/or temperature °F shown. Where not shown temperature is 70°F (21°C) Ambient. RATING KEY: (A) Excellent (B) Good (C) Fair to Poor (X) Not Recommended (ND) No Data Available</p>														

CHEMICAL FORMULA	ELASTOMERS							METAL PARTS				PLASTICS		
	Neoprene	Nitrile	E.P.D.M.	Hytrel	(FKM) Fluorocarbon	PTFE, PFA	Santoprene	Aluminum	Cast Iron / Steel	Stainless Steel	Alloy C (Hastelloy Equiv)	Polypropylene	Acetal	PVDF
Sulfuric Acid 95% H2SO4	X	X	C	X	A	A	A	X	B	A	A	X	ND	A ^{120°}
Sulfurous Acid H2SO3	X	B	C	C	A	A	A	B	X	B	B	A	X	A
Tall Oil (Liquid Rosin) Rosin acids	B	A	X	ND	A	A	A	X	B ^{212°}	B	A	A	ND	A
Tallow Fat from cattle, sheep	ND	A	ND	ND	A	A	B	A	ND	A	ND	B	C	ND
Tannic Acid C76H52O46	B	C	C	10%A	A	A	A	A	A	A	10%B	A	X	A
Tanning Liquors Tannic acid	B	A	ND	ND	ND	A	A	A	ND	A	A	A	X	ND
Tar, Bituminous(Coal Tar) (Pitch) Mixture of aromatic & phenolic hydrocarbons	C	B	X	X	A	A	B	A	ND	A	A	A	A	ND
Tartaric Acid C4H6O6	A	B	B	B	A	A	A	20%A	X	A	90%A	A	X	A
Terpenes C10 hydrocarbons	X	C	X	ND	A	A	ND	A	X	ND	ND	ND	ND	ND
Terpineol (Terpilenol) C10H18O	X	C	C	ND	A	A	B	A	A	A	A	X	ND	B ^{120°}
Tertiary Butyl Alcohol (CH3)3COH	A	A	ND	ND	B	A	B	ND	ND	ND	ND	B	ND	ND
Tertiary Butyl Catechol C9H14O2	B	X	ND	ND	A	A	B	C	B	B	ND	ND	ND	ND
Tertiary Butyl Mercaptan C4H10S	X	X	ND	ND	A	A	B	ND	ND	ND	ND	ND	ND	ND
Tetra Bromomethane CBr4	X	X	ND	ND	A	A	X	X	ND	ND	ND	X	ND	ND
Tetrabutyl Titanate Ti(C4H9)	A	B	B	ND	A	A	B	ND	ND	ND	ND	ND	ND	ND
Tetrachlorodifluoroethane (Cl2FC)2	X	X	ND	ND	ND	A	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethane (Acetylene Tetrachloride) (Cl2HC)2	X	X	X	ND	A	A	X	X	A	C	90%A ^{212°}	X	A	A
Tetrachloroethylene Cl2C = CCl2	ND	ND	ND	ND	ND	ND	X	ND	ND	ND	ND	ND	ND	A
Tetraethyl Lead Pb(C2H5)4	X	B	X	ND	B	A	C	B	A	A	ND	A	ND	A
Tetraethylene Glycol (TEG) HOCH2, (CH2OCH2)3CH2OH	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrahydrofuran (THF) C4H8O	X	X	C	C	X	A	B	ND	ND	ND	ND	C ^{100°}	A	B ^{70°}
Tetrahydronaphthalene (Tetralin) C10H12	X	X	X	ND	A	A	ND	A	A	A	A	C	ND	ND

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RATING KEY: (A) Excellent (B) Good (C) Fair to Poor (X) Not Recommended (ND) No Data Available

CHEMICAL FORMULA	ELASTOMERS							METAL PARTS				PLASTICS		
	Neoprene	Nitrile	E.P.D.M.	Hytrel	(FKM) Fluorocarbon	PTFE, PFA	Santoprene	Aluminum	Cast Iron / Steel	Stainless Steel	Alloy C (Hastelloy Equiv)	Polypropylene	Acetal	PVDF
Thionyl Chloride SOCl2	X	X	X	ND	B	A	B	C	A	A	10%A	B	B	X
Thiophene C4H4S	X	X	X	ND	C	A	ND	ND	ND	ND	ND	ND	ND	ND
Titanium Tetrachloride TiCl4	X	C	X	ND	A	A	X	X	A	B	B	B	ND	B
Toluene (Toluol) C7H8	X	C	X	C	B	A	C	A	A	A	A	X	B	A
Toluene Diisocyanate CH3C6H3 (NCO)2	X	ND	A	B	ND	A	B	ND	ND	ND	ND	ND	ND	ND
Toluidine CH3C6 • H4NH2	ND	X	ND	ND	B	A	ND	A	A	A	A	ND	ND	ND
Tomato Pulp & Juice	ND	A	ND	ND	ND	A	A	B	ND	A	A	A	ND	A
Toothpaste	C	A	ND	ND	A	A	ND	ND	X	A	A	ND	ND	ND
Transformer Oil (Petroleum) Hydrocarbons	C	B	X	ND	A	A	X	A	A	A	A	B	C	ND
Transmission Fluid (Type A)	C	A	X	B	A	A	C	A	A	A	A	ND	ND	ND
Triacetin C3H5, (OCOCH3)3	B	A	A	ND	X	A	A	B	ND	ND	ND	ND	ND	ND
Triallyl Phosphate P(OC3H5)3	C	X	A	ND	A	A	ND	ND	ND	ND	ND	B	ND	A
Triaryl Phosphate (C6H5O)3PO	C	X	ND	ND	A	A	ND	ND	ND	ND	ND	ND	ND	ND
Tributyl Phosphate (TBP) (C4H9)3PO4	X	X	C	C	X	A	B	A	A	A	ND	B ^{100°}	ND	A ^{100°}
Tributyoxyl Ethyl Phosphate (C4H9O)3P(C2H5)	X	X	A	ND	B	A	B	ND	ND	ND	ND	ND	ND	ND
Trichloroacetic Acid (TCA) CCl3COOH	B	C	C	X	B	A	B	X	X	X	B	B	ND	B
Trichlorobenzenes C6H3Cl3	X	X	ND	ND	B	A	ND	X	A	A	B	ND	ND	ND
Trichloroethane C2H3Cl3	X	X	X	ND	B	A	X	X	A	A	A	X	ND	A
Trichloroethylene (Ex-Tri) (Hi-Tri)® C2HCl3	X	X	X	X	C	A	X	X	B	90%A ^{167°}	A	X	B	A
Trichloropropane CH2ClCH ClCH2Cl	A	X	ND	ND	B	A	X	X	A	A	A	X	ND	ND
Tricresyl Alcohol (Tridecanol) C12H25 • CH2OH	ND	A	ND	ND	B	A	ND	ND	ND	ND	ND	ND	ND	ND
Tricresyl Phosphate (Lindol) (TCP)® (CH3C6H4O)3 • PO	C	X	A	C	C	A	B	ND	A	B	A	B	ND	X
Triethanol Amine (TEA) N(C2H4OH)3	A	X	B	X	C	A	A	A	A	A	A	A	B	X
Triethyl Aluminum (ATE) Al(C2H5)3	X	X	ND	ND	B	A	B	ND	ND	ND	ND	ND	ND	ND

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CHEMICAL FORMULA	ELASTOMERS							METAL PARTS				PLASTICS		
	Neoprene	Nitrile	E.P.D.M.	Hytrel	(FKM) Fluorocarbon	PTFE, PFA	Santoprene	Aluminum	Cast Iron / Steel	Stainless Steel	Alloy C (Hastelloy Equiv)	Polypropylene	Acetal	PVDF
Triethyl Amine (CH3CH2)3N	B	A	ND	ND	ND	A	ND	ND	A	A	A	C	ND	A ^{120°}
Triethyl Borane (C2H5)3B	X	X	ND	ND	A	A	B	ND	ND	ND	ND	ND	ND	ND
Triethylene Glycol (TEG) (CH2OCH2CH2OH)2	ND	A	ND	ND	A	A	ND	ND	ND	ND	ND	A	ND	ND
Trimethylene Glycol HO(CH2)3OH	ND	A	A	ND	A	A	ND	A	A	A	A	ND	ND	ND
Trinitrotoluene (TNT) CH3C6H2(NO2)3	B	X	X	ND	C	A	A	ND	ND	ND	ND	ND	ND	ND
Trioctyl Phosphate (C8H17O)3PO	X	X	A	ND	B	A	B	ND	ND	ND	ND	ND	ND	ND
Tung Oil (Wood Oil) Fatty acids	C	A	X	B	A	A	B	A	ND	A	A	A	ND	ND
Turpentine C10H16	X	A	X	B	A	A	C	A	A	A	A	X	A	A
Unsymmetrical Dimethyl (Hydrazine) (UDMN) H2NN(CH3)2	C	C	A	ND	X	A	B	ND	ND	ND	ND	ND	ND	A
Urea (Carbamide) CO(NH2)2	B	B	ND	B	A	A	ND	B	ND	50%B	ND	A	A	A
Urine	X	A	ND	ND	A	A	A	A	A	A	A	A	C	A
Valeric Acid CH3(CH2)3COOH	X	X	A	ND	ND	A	ND	A	ND	ND	ND	ND	ND	ND
Vanilla Extract (Vanillin) C6H3(CHO) • (OCH3)(OH)	X	A	ND	ND	X	A	ND	ND	ND	A	ND	ND	ND	ND
Varnish Oil, gum resins, oil of turpentine	C	B	X	ND	A	A	ND	A	ND	A	A	A	ND	A
Vegetable Juices	C	A	ND	ND	ND	A	A	C	ND	A	ND	ND	ND	ND
Vegetable Oils	C	B	A	ND	A	A	B	A	B	A	A	X	ND	ND
Vinegar Dilute acetic acid	B	C	A	C	A	A	A	C	X	A	A	A	C	A
Vinyl Acetate CH3COOC, HCH2	B	X	ND	ND	X	A	ND	B	A	A	A	B	ND	A
Vinyl Chloride (Chloroethylene) CH2CHCl	X	X	C	ND	A	A	X	X	A	A	A	X	ND	B
Walnut Oil	B	A	ND	ND	A	A	ND	ND	ND	ND	ND	ND	ND	ND
Water, Distilled (Also Deionized) H2O	C	A	A	ND	A ^{72°}	A	A	A	C	A	A	A	A	A
Water, Fresh H2O	B	A	A	A ^{72°}	A ^{72°}	A	A	A	A	A	A	A	A	A
Waxes Hydrocarbons	A	A	X	ND	ND	A	ND	A	ND	A	A	ND	A	ND
Weed Killers	C	B	ND	ND	A	ND	B	X	ND	A	ND	ND	ND	ND
Whiskey Ethanol, esters, acids	A	B	A	B	A	A	A	A	X	A	A	A	B	A

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CHEMICAL FORMULA	ELASTOMERS							METAL PARTS				PLASTICS		
	Neoprene	Nitrile	E.P.D.M.	Hytrel	(FKM) Fluorocarbon	PTFE, PFA	Santoprene	Aluminum	Cast Iron / Steel	Stainless Steel	Alloy C (Hastelloy Equiv)	Polypropylene	Acetal	PVDF
White Oil (Mineral) (Petroleum) Mixture of liquid hydrocarbons	C	A	X	ND	A	A	C	ND	ND	A	A	ND	ND	ND
White Sulfate Liquor	A	B	A	ND	B	A	ND	B	C	A	B	A	ND	A
Wines	A	A	A	A	B	A	A	C	X	A	A	A	B	A
Wort, Distillery Sugar solution from malt	A	ND	ND	ND	A	A	ND	A	B	A	A	ND	ND	ND
Xylene (Xylol) C6H4(CH3)2	X	X	X	C	A	A	C	A	B	B	A	X	A	A
Xylidines (Xylidin) (CH3)2C6H3NH2	X	ND	X	ND	X	A	C	B	B	ND	ND	ND	ND	ND
Zeolite Hydrated alkali aluminum silicates	C	C	A	ND	A	A	A	ND	ND	A	A	ND	ND	ND
Zinc Acetate Zn(C2H3O2)2	B	C	A	ND	X	A	A	C	ND	ND	ND	A	ND	A
Zinc Carbonate ZnCO3	ND	A	ND	ND	A	A	ND	B	B	B	B	ND	ND	ND
Zinc Chloride ZnCl2	B	B	A	A	A	A	A	10%A	B	10%A	A	A	B	A
Zinc Hydrosulfite ZnHSO3	A	A	ND	ND	A	A	A	X	ND	A	ND	ND	ND	ND
Zinc Sulfate ZnSO4	A	A	A	X	B	A	A	20%B	X	B	90%B	A	B	A

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