



CHEMICAL RESISTANCE GUIDE

CHEMICAL Formula	ELASTOMERS								METAL PARTS				PLASTICS		
	POLYURETHANE	NEOPRENE	BUNA-N	E.P.D.M.	HYTREL®	(V)FKM FLUOROCARBON	PTFE, PFA	(TPE XL) SANTOPRENE®	ALUMINUM	CAST IRON/STEEL	STAINLESS STEEL	HASTELLOY	POLYPROPYLENE	ACETAL	PVDF
Acetaldehyde (Ethanal) CH ₃ CHO	X	X	X	A	B	X	A	B	A	B	A	A	C	A	A ^{150°}
Acetamide (Acetic Acid Amide) CH ₃ CONH ₂	X	B	B	A		B	A	A	A	X	X	A	A		A ^{140°}
Acetate Solvents CH ₃ COOR		X	X			X	A	B	A		A		X	A	A
Acetic Acid — 20%	B	B	C	A	A	C	A	B		A	A	C	B	A	B
Acetic Acid — 30%	X	B	C	A	A	X	A	B	X	A	A	C	B	B	B
Acetic Acid — 50% CH ₃ COOH	C	C	C	A		C	A	B	X	A	A	C	B	B	B
Acetic Acid — Glacial CH ₃ COOH	X	X	C	B	A	X	A	B	B	X	A	A	C	B	A ^{120°}
Acetic Anhydride (Acetic Oxide) (CH ₃ CO) ₂ O	X	B	C	B	C	X	A	A	B	90%B ^{212°}	A	A	X	X	B ^{70°}
Acetone (Dimethylketone) CH ₃ COCH ₃	X	X	X	A	C	X	A	B	B	A	A	A	X	B ^{120°}	X
Acetone Cyanohydrin (CH ₃) ₂ C(OH)CN	X	B	X	X		X	A	A	B	B	B				
Acetonitrile (Methyl Cyanide) CH ₃ CN		A	C	A		X	A	A	A	A	A	B ^{100°}		A	A
Acetophenone (Phenyl Methyl Ketone) C ₆ H ₅ COCH ₃	X	X	X	A		X	A	B	B	A	A	B	A ^{70°}		A
Acetyl Acetone (2,4-Pentanedione) CH ₃ COCH ₂ COCH ₃	B	X	X	A		X	A	B	X	B	B				
Acetyl Chloride CH ₃ COCl		X	X	C	X	B	A	B	X	A	B	A	X		A
Acetylene (Ethyne) HC≡CH		C	A	A	A	A	A	C	A	A	A	A	X	A	A
Acetyl Salicylic Acid (Aspirin) (CH ₃ OCO) • C ₆ H ₄ COOH		X		B			A	A	X	B	B				
Acetylene Tetrabromide (Tetra Bromoethane) (CHBr ₂) ₂		X	X			A	A	X	X	A					
Acrolein (Acrylaldehyde) H ₂ C = CHCHO			B			A	A	A	B	B	B				
Acrylonitrile (Vinyl Cyanide) CH ₂ =CHCN		X	X	X		X	A	B	A	A	A	A	B		A
Adipic Acid (1,4-Butanedicarboxylic Acid)		X	B			A	A	B	B	B	B	A	A		A
Allyl Alcohol (2-Propen-1-ol) CH ₂ CHCH ₂ OH		A	A	A		B	A	B	A	A	A				A
Alcohols R-OH					B							A	A	A	A
Amyl (1-Pentanol) C ₄ H ₉ CH ₂ OH		B	B			B	A	A	B		A	A	B	A	A
Benzyl (Phenylcarbinol) C ₆ H ₅ CH ₂ OH		B	X			A	A	A	B		A	A	A		A
Butyl (Butanol) C ₃ H ₇ CH ₂ OH		A	A			A	A	A	B		A	A	B	A	A

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

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	POLYURETHANE	NEOPRENE	BUNA-N	E.P.D.M.	HYTREL®	(V)FKM FLUOROCARBON	PTFE, PFA	(TPE XL) SANTOPRENE®	ALUMINUM	CAST IRON/STEEL	STAINLESS STEEL	HASTELLOY	POLYPROPYLENE	ACETAL	PVDF
Diacetone (Tyranton) $(CH_3)_2C(OH)CH_2COCH_3$	C	X	X	B		X	A	C	A	A	A	A	X	A	A
Ethyl (Ethanol) CH_3CH_2OH	X	A	A		X	B	A	B	B	B	A	A	A ^{100°}		A
Hexyl (1-Hexanol) $C_5H_{11}CH_2OH$		B	A			A	A	B	A		A	A	A ^{70°}		A
Isobutyl (2-Methyl-1-Propanol) $C_3H_7CH_2OH$	X	A	C			A	A	A	B		A	A			A
Isopropyl (2-Propanol) $H_3CCH(OH)CH_3$		B	C			A	A	B	B	C	A	A	A		A ^{150°}
Methyl (Methanol) CH_3OH		A	A	X		X	A	A	B	A	A	A	A ^{120°}		A
Octyl (Caprylic Alcohol) $C_7H_{15} \bullet CH_2OH$		B	B			A	A	B	A		A	A			
Propyl (Propanol) $C_2H_5CH_2OH$		A	A			A	A	A	A		A	A	A		A ^{120°}
Allyl Bromide (3-Bromopropene) $H_2C=CHCH_2Br$		X	X	X		B	A		X	A					
Allyl Chloride (3-Chloropropene) $CH_2=CHCH_2Cl$		X	X	X		B	A		X	C	B		A ^{70°}		A
Alkazene® (Chlorethyl or Polyisopropyl benzenes)		X	X			A	A	X							
Almond Oil (Artificial)	X	X	X	B		X	A								
Alum (Aluminum Potassium Sulfate Dodecahydrate) $KAl(SO_4)_2 \bullet 12H_2O$		A	A	A		X	A	A			B	B	A		A
Aluminum Acetate (Burow's Solution)		C	C	A		X	A	A			B	C	A	A	A ^{100°}
Aluminum Bromide $AlBr_3$		A	A				A								A
Aluminum Chloride $AlCl_3$	B	A	A	A	B	A	A	20%A	X	C	B	25%A	A	B	A
Aluminum Fluoride AlF_3		A	A	B		A	A	A	50%A	C	C	20%A	A	X	A
Aluminum Hydroxide (Alumina Trihydrate) $Al(OH)_3$		A	B	A		C	A	A	10%B	30%B	B	10%B	A		A
Aluminum Nitrate $Al(NO_3)_3 \bullet 9H_2O$		A	A	A		A	A	A	X		0%A	0%B	A		A
Aluminum Phosphate $AlPO_4$		A	A	A		A	A	A							
Aluminum Potassium Sulfate (Potash Alum) $KAl(SO_4)_2$		A	A	A		A	A	A	10%A	X	A	B	A	A	A
Aluminum Sodium Sulfate (Soda Alum) $NaAl(SO_4)_2$	A	A	A	A		A	A								

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	POLYURETHANE	NEOPRENE	BUNA-N	E.P.D.M.	HYTREL®	(VT)FKM FLUOROCARBON	PTFE, PFA	(TPE XL) SANTOPRENE®	ALUMINUM	CAST IRON/STEEL	STAINLESS STEEL	HASTELLOY	POLYPROPYLENE	ACETAL	PVDF
Aluminum Sulfate (Cake Alum) $Al_2(SO_4)_3$	A	A	A	A	B	A	A	A	30%B	X	50%A ^{167°}	90%A ^{212°}	A	B	A
Amines R-NH ₂		B	X		A ^{70°}	X		A	A	A	A		B	C	
Ammonia Anhydrous, Liquid NH ₃	X	B	B	A	X	X	A	A	A	A	A	A	A	X	A
Ammonia Gas — Cold		A	A			A	A	A							
Ammonia Gas — Hot		B	C			X	A	A							
Ammonia Liquors		A				X	A	A	A	A	A				
Ammonium Nitrate NH ₄ NO ₃		B	A	A	B	A	A	A	B	B	A	A	A	B	A
Ammonium Cupric Sulfate (NH ₄) ₂ Cu(SO ₄) ₂			A			A	A								
Ammonium Acetate CH ₃ CO ₂ NH ₄		A				A	A	A	50%B	50%A					
Ammonium Bicarbonate NH ₄ HCO ₃		A	A	A		A	A	B	B	90%B					
Ammonium Bifluoride — 10% NH ₄ HF ₂		X	B					A	A	C	X	B	B	A	A
Ammonium Carbonate (NH ₄) ₂ CO ₃		B	X	A		A	A	A	B	B	70%B ^{212°}	70%B ^{212°}	A		A
Ammonium Casenite		A						A			A				
Ammonium Chloride (Sal Ammoniac) NH ₄ Cl	A	A	A	A	A	A	A	A	X	X	B	A	A	X	A
Ammonium Dichromate (NH ₄) ₂ Cr ₂ O ₇		A	A	A				A	A	30%A					
Ammonium Fluoride NH ₄ F		B	B			20%A	A		10%B	20%B	B	40%A	B		A
Ammonium Hydroxide (Aqua Ammonia) NH ₄ OH	A	B	B	A		B	A	A	30%A	30%B	50%A	80%A	A	B	A
Ammonium Metaphosphate		A	A	A		A	A		90%B	B	B	A	A		A
Ammonium Nitrite NH ₄ NO ₂		A	A					A					70%A		A
Ammonium Oxalate (NH ₄ OOx) ₂		A	A					A			A	A			
Ammonium Persulfate (NH ₄) ₂ S ₂ O ₈	X	A	C	B		A	A	A	C	X	A		A		A
Ammonium Phosphate, Monobasic (NH ₄)H ₂ PO ₄		A	A	A	B	A	A	A	X	X	B	5%A	A		A
Ammonium Phosphate, Di-Basic (NH ₄) ₂ HPO ₄		A	A			A	A	A	B		A	A	A	B	A
Ammonium Phosphate, Tri-Basic (NH ₄) ₃ PO ₄ • 3H ₂ O		A	A			A	A	A	X		B	B	A		A
Ammonium Sulfate (NH ₄) ₂ SO ₄	A	A	A	A	C	A	A	A	X	B	80%A ^{212°}	40%B	A	B	A
Ammonium Sulfide (NH ₄) ₂ S		A	A			A	A		B		B	10%A			

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	POLYURETHANE	NEOPRENE	BUNA-N	E.P.D.M.	HYTREL®	(VT)FKM FLUOROCARBON	PTFE, PFA	(TPE XL) SANTOPRENE®	ALUMINUM	CAST IRON/STEEL	STAINLESS STEEL	HASTELLOY	POLYPROPYLENE	ACETAL	PVDF
Ammonium Sulfite (NH ₄) ₂ SO ₃ •H ₂ O			A			A	A		C	X	B	A ^{212°}	A	X	
Ammonium Thiocyanate NH ₄ SCN		A	A	A		A	A		C	C	50%A	50%A			
Ammonium Thiosulfate (NH ₄) ₂ S ₂ O ₃		A	A	A		A	A	A	40%A	X	10%A				
Amyl Acetate (Banana Oil) CH ₃ CO ₂ C ₅ H ₁₁	X	X	X	A	C	X	A	B	A	B	A	B	X	X	A ^{120°}
Amyl Alcohol (Pentyl Alcohol) CH ₃ (CH ₂) ₄ OH	X	A	B	A	A	A	A	B	A	A	A	B	A		A
n-Amyl Amine (1-Aminopentane) CH ₃ (CH ₂) ₄ NH ₂		X	C	X		X	A								
Amyl Borate C ₅ H ₁₁ BO ₃		B	A			A	A	B							
Amyl Chloride (Chloropentane) CH ₃ (CH ₂) ₄ Cl		X	X	X		A	A	C	X	A	A	B	X	A	A
Amyl Chloronaphthalene		X	B			A	A	C							
Amyl Naphthalene C ₁₅ H ₁₈		X	X	X		A	A	C							
Amyl Phenol C ₆ H ₄ (OH)C ₅ H ₁₁			X			A	A		A	A	A	A			
Aniline (Aniline Oil) (Amino Benzene) C ₆ H ₅ NH ₂	X	X	X	C	X	B	A	B	B	A	A	B	A	A	A
Aniline Dyes	X	C	C	C		B	A	B	B	C	B				
Aniline Hydrochloride C ₆ H ₅ NH ₂ •HCl		X	C			B	A	A	X	X	X		X		A
Animal Fats & Oils	A	C	A	B	B	A	A	C	A	X	A	A			A
Animal Gelatin	A	A	A	A		A	A				A				
Anisole (Methylphenyl Ether) C ₆ H ₅ OCH ₃		X				X	A		B	B	B	B			
Ansul Ether		X	C			X	A	X							
Anthraquinone C ₁₄ H ₈ O ₂							A		B	B	B	A			
Anti-Freeze (Alcohol Base)	X	A	A	A		A	A		A	A	A	A			
Anti-Freeze (Glycol Base) (Prestone® Etc.)	B	B	A	A		A	A	A	A	A	A	A			
Antimony Pentachloride SbCl ₅			X				A		A	A	A	A			
Antimony Trichloride SbCl ₃			B	A		A	A		B	A	A	B	A		A
Aqua Regia (Nitric & Hydrochloric Acid)	X	X	X	X		B	A	X	X	X	X	C	C	X	A
Aroclor® PCB mixtures		X	C	X		A	A		A	B	A	90%A	X		
Aromatic Hydrocarbons C ₆ H ₅ R		X	X		C	A	A	C	A	A	A				
Aromatic Solvents (Benzene Etc.)	X	X	C	X		B	A		A	B	A	B			

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	POLYURETHANE	NEOPRENE	BUNA-N	E.P.D.M.	HYTREL®	(VT) FKM FLUOROCARBON	PTFE, PFA	(TPE XL) SANTOPRENE®	ALUMINUM	CAST IRON/STEEL	STAINLESS STEEL	HASTELLOY	POLYPROPYLENE	ACETAL	PVDF
Arsenic Acid AsH ₃ O ₄	X	A	B	A		A	A	A	A	X	B	B	A		A
Arsenic Trichloride (Arsenic Butter) AsCl ₃		A	C	X		X	A	B	B	B	X	B			
Ascorbic Acid C ₆ H ₈ O ₆						A	A		A	X	A				
Askarel® (Pyranol®) PCB mixtures	X	X	B	X		C	A	X			A				
Asphalt Hydrocarbons	B	C	B	X	B	A	A	B	A	B	A		A	B	A
Asphalt Topping Hydrocarbons		A	C		B	C	A			A	A				
ASTM — Ref Motor Fuel A (Aliphatic) Hydrocarbons	A	B	A	X	A	A	A		A	A	A	A			
ASTM — Ref Motor Fuel B (30% Aromatic) Hydrocarbons	B	X	A	X	A	A	A		A	A	A	A			
ASTM — Ref Motor Fuel C (50% Aromatic) Hydrocarbons	X	X	B	X	C	A	A		A	A	A	A			
ASTM — Ref #1 Oil (High Aniline) Hydrocarbons	A	B	A	X	A	A	A	A	A	A	A	A			
ASTM — Ref #2 Oil (Medium Aniline) Hydrocarbons	B	B	A	X	A	A	A	A	A	A	A	A			
ASTM — Ref #3 Oil (Low Aniline) Hydrocarbons	B	C	A	X	A	A	A	B	A	A	A	A			
ASTM — Ref #4 Oil (High Aniline) Hydrocarbons	X	X	B	X		A	A		A	A	A	A			
Aviation Gasoline Hydrocarbons		C	A	X		A	A		A	A	A	A			
Barbeque Sauce Water, oils, spices		A	A				A			X	A				
Barium Carbonate BaCO ₃		A	A	A		A	A	A	X	B	B	B	A		A
Barium Chloride Dihydrate BaCl ₂ • 2H ₂ O	A	A	A	A		A	A		50%B	B	B ^{212°}	B		A	A
Barium Cyanide Ba(CN) ₂		A	C		X	A		A			A		X		
Barium Hydroxide (Barium Hydrate) Ba(OH) ₂	A	A	A	A	B	A	A	A	X	B	50%A ^{122°}	B	A		A
Barium Nitrate Ba(NO ₃) ₂		A	A				A	A	B	A	A	A	A	B	A
Barium Sulfate (Blanc Fixe) BaSO ₄	A	A	A	A	X	A	A	A	B	B	B		A	B	A
Barium Sulfide BaS	A	A	A	A		A	A	A	X		B	A	A		A
Beef Extract		A	A			A	A			X	A				
Beer Water, carbonate	X	A	C	A	B	A	A	A	A	X	A	A	A ^{75°}	A	A ^{175°}
Beet Sugar Liquors (Sucrose)	X	A	A	A		A	A	A	A	B	A		A	B	A

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Benzaldehyde C ₆ H ₅ CHO	X	X	X	B	B	X	A	B	A	A	A	A	X		A
Benzene (Benzol) C ₆ H ₆	X	X	X	X	C ^{70°}	B	A	C	B	B	A ^{167°}	B	X	A	B
Benzene Sulfonic Acid C ₆ H ₅ SO ₃ H		A	C	C		A	A		C	A	A	90%A	X		B ^{100°}
Benzoic Acid (Benzene Carboxylic Acid) C ₆ H ₅ COOH		B	X	B		A	A		B	X	B	70%A	X	B	A
Benzoyl Chloride C ₆ H ₅ COCl	X	X	X	X		B	A		X	A	B	B			A
Benzyl Acetate CH ₃ CO ₂ • H ₂ C ₆ H ₅			X			X	A		A	A	A	B			
Benzyl Alcohol C ₆ H ₅ CH ₂ OH		C	X	C		A	A		A	A	A	B	A		A
Benzyl Benzoate C ₆ H ₅ CO ₂ CH ₂ C ₆ H ₅		X	X	B		A	A	C	A	B	B	B			
Benzyl Chloride (Chlorotoluene) C ₆ H ₅ CH ₂ Cl	X	X	X	X		A	A	C	X	A	B	A	X	A	A
Benzyl Dichloride (Benzal Chloride) C ₆ H ₅ CHCl ₂			X				A		X	B	A	B			
Biphenyl (Diphenyl) C ₆ H ₅ C ₆ H ₅		X	X	X		A	A		A	A					
Bismuth Subcarbonate (Bismuth Carbonate) (BiO) ₂ CO ₃		A	A	A		A	A				10%B				
Black Sulfate Liquor	X	A	B	A	B	A	A		C	B	A	B			
Blast Furnace Gas CO, H ₂ , CH ₄ , CO ₂ , N ₂		A	C		B	A	A	A							
Bleach Solutions Water, chlorine, oxygen		X	X	A	C	B	A	B	X		B	A ^{125°}	X		
Borax (Sodium Borate) B ₄ Na ₂ O ₇	A	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			A	A			
Boric Acid (Boracic Acid) H ₃ BO ₃	A	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			A	A	A	A	A	A	X		
Brewery Slop		A	A			A	A	A		A	A				
Brine (Sodium Chloride) Salt water	A	B	A	A	B	A	A			X	A	A	A		A
Bromine — Anhydrous Br ₂	X	X	X	C	X	A	A	C	B	C	X	A	X		A ^{150°}
Bromine Trifluoride BrF ₃	X	X	X	X		X	A	C	A		B		X		
Bromine Water		B	X	X		B	A	B	X	X	X	A	X		A

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Bromobenzene C ₆ H ₅ Br	X	X	X	X		B	A	X	X	B	A	B	X		
Bromochloromethane BrCH ₂ Cl		X	X	B		C	A		X	B	B	B			
Bromotoluene C ₆ H ₄ BrCH ₃			X			B	A		X	A	A	A			
Bronzing Liquid	X	X	X	B		X	A	A			A	A			
Bunker Oil (Fuel) #5, #6 & C Hydrocarbons	C	B	A	X		A	A	B	A	A	A	A			
Butadiene C ₄ H ₆	X	C	X	C		C	A	C	A	A	A		X		A
Butane (LPG) (Butyl Hydride) C ₄ H ₁₀	B	B	A	X	A	A	A	C	A	A	A	A	X	B	A
Butter Fats	A	C	A	A	B	A	A	B	A	X	A				
Buttermilk Fats, water		A	A			A		A	A		A		A		A
Butyl Acetate CH ₃ CO ₂ (CH ₂) ₃ CH ₃	C	X	X	B	C	X	A	B	A	A	A	A	X	B	A ^{100°}
n-Butyl Acetate CH ₃ CO ₂ (CH ₂) ₃ CH ₃		X	X	X		X	A	A	A	A	A	A			
Butyl Acetyl Ricinoleate C ₂₄ H ₄₄ O ₅		X	C	C		B	A	B				A			
Butyl Acrylate CH ₂ CHCO ₂ C ₄ H ₉		X	X	X		X	A	C							C
Butyl Alcohol (Butanol) CH ₃ (CH ₂) ₃ OH	X	A	A	B	B	A	A	A	A	B	A	A	A		A
Butyl Amine (Aminobutane) CH ₃ (CH ₂) ₂ CH ₂ NH ₂	X	X	B	X		X	A	A	A	A	A		X	C	B ^{70°}
Butyl Benzoate C ₆ H ₅ COO • (CH ₂) ₃ CH ₃		X		B		A	A	C	B	B	B	B			
Butyl Bromide CH ₃ (CH ₂) ₂ CH ₂ Br			X			B	A								A
Butyl Butyrate CH ₃ (CH ₂) ₂ • CH ₂ CO ₂ C ₄ H ₉			X			X	A		A	A	A	A			
Butyl Carbitol® CH ₃ (CH ₂) ₃ OCH ₂ CH ₂ OCH ₂ CH ₂ OH		B	A	A		A	A	B							
Butyl Cellosolve® HOCH ₂ CH ₂ OC ₄ H ₉		C	B			C	A	A							B
Butyl Chloride (Chlorobutane) CH ₃ (CH ₂) ₃ Cl			X			A	A		X	B	B	B	X		A
Butyl Ether (Dibutyl Ether) (CH ₃ (CH ₂) ₃) ₂ O		B	A			C	A		A	B	A	A	X		A ^{100°}
Butyl Oleate C ₂₂ H ₄₂ O ₂		X		C		A	A	C							
Butyl Stearate CH ₃ (CH ₂) ₁₆ CO ₂ (CH ₂) ₃ CH ₃		X	A	C		B	A	C	B	B	B	B			A
Butylene (Butene) C ₄ H ₈	X	X	B	X		B	A	X	A		A		X		A

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

CHEMICAL Formula	ELASTOMERS								METAL PARTS				PLASTICS		
	POLYURETHANE	NEOPRENE	BUNA-N	E.P.D.M.	HYTREL®	(V)FKM FLUOROCARBON	PTFE, PFA	(TPE XL) SANTOPRENE®	ALUMINUM	CAST IRON/STEEL	STAINLESS STEEL	HASTELLOY	POLYPROPYLENE	ACETAL	PVDF
Butyraldehyde CH ₃ (CH ₂) ₂ CHO	C	X	X	C		X	A	C	A	A	A	A			
Butyric Acid CH ₃ (CH ₂) ₂ CO ₂ H		X	C	C	B	C	A	A	A	X	B	A	A	X	A
Butyronitrile CH ₃ CH ₂ CH ₂ CN		X	X	A			A								
Calcium Acetate Hydrate Ca(CH ₃ COO) ₂ • H ₂ O		C	B	A		X	A		C	C	B	B			
Calcium Bisulfite Ca(HSO ₃) ₂	A	A	A	X	X	A	A		X	X	90%A	A		A	X
Calcium Carbonate (Chalk) CaCO ₃		A	A	A		A	A	A	C	B	B	B	A	A	A
Calcium Chlorate Ca(ClO ₃) ₂		A	A	A		A	A		30%B	B	0%B	70%B	A		A
Calcium Chloride (Brine) CaCl ₂ • 6H ₂ O	A	A	A	A	A	A	A	A	A	A	A	A	A	X	A
Calcium Hydrosulfide (Calcium Sulfhydrate) Ca(HS) ₂ • 6H ₂ O			A			A	A								
Calcium Hydroxide (Slaked Lime) Ca(OH) ₂	A	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	X	C	B	5%A	B	A	A	X	X	B	B ^{125°}	A	A	A
Calcium Nitrate Ca(NO ₃) ₂	A	A	A	A		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		A		A	A	A	A			
Calcium Silicate Ca ₂ SiO ₄			A			A	A		A	B	A	A			
Calcium Sulfate (Gypsum) CaSO ₄	B	A	A	A		A	A		A	C	10%B	10%A	A	A	X
Calcium Sulfide CaS	A	B	A	A		A	A	A	20%A	B	B	A	A ^{120°}		A
Calcium Sulfite CaSO ₃ • 2H ₂ O			A			A	A		10%B	B	10%A				
Calgon® (NaPO ₃) ₆		A	A			A		A		X	A		A		
Cane Juice, Sucrose, water		A	A					A	B	A	A		X		
Cane Sugar Liquors Sucrose, water	X	A	A	A	B	A	A	A	A	A	A		A		A
Capryl Alcohol (Octanol) CH ₃ (CH ₂) ₆ CH ₂ OH	X	B	A	C		B	A		A	A	A	A			
Caprylic Acid (Octanoic Acid) CH ₃ (CH ₂) ₆ COOH			C				A		A		A	A			A
Carbamate H ₂ NCO ₂ R	X	C	C	C		A	A	A							
Carbitol® CH ₃ CH ₂ OCH ₂ CH ₂ OCH ₂ CH ₂ OH	X	C	B	C		C	A	B	A	A	A	A			

Rating specific to % of concentration. Temperature shown is °F. Where not shown, temperature is 70°F (21°C) Ambient.

CHEMICAL Formula	ELASTOMERS								METAL PARTS				PLASTICS		
	POLYURETHANE	NEOPRENE	BUNA-N	E.P.D.M.	HYTREL®	(V)FKM FLUOROCARBON	PTFE, PFA	(TPE XL) SANTOPRENE®	ALUMINUM	CAST IRON/STEEL	STAINLESS STEEL	HASTELLOY	POLYPROPYLENE	ACETAL	PVDF
Carbolic Acid (see Phenol) C ₆ H ₅ OH	X	C	X	C		A	A	A	B	A	B	A	C	X	A ^{150°}
Carbon Dioxide (Carbonic Acid Gas) CO ₂	A	A	A	B	A	A	A	A	A	A	A	A	A	A	A
Carbon Disulfide (Carbon Bisulfide) CS ₂	C	X	X	X	C	A	A	X	A	B	90%A		X	B	A
Carbon Monoxide CO	A	A	C	C	A	C	A	A	A	A	A	A	A	B	A
Carbon Tetrachloride (Tetrachloromethane) CCl ₄	X	X	C	X	X	A	A	X	X	C	B	A	X	B	A
Carbonated Beverages CO ₂ /H ₂ O	A	A	A				A	A	C		A	A	A		A
Carbonic Acid (liquid) H ₂ CO ₃		A	B		C	A	A	A	A	X	B	A	A	A	A
Casein a phosphoprotein		A	A	A		A	A		B		B	B			
Castor Oil a mixture of fatty acids	A	A	A	B	B	A	A	B	A	B	A	A			
Catsup (Ketchup)		C	A			A	A	A	B	X	A	A	A		
Cellosolve® (Glycol Ethers) HOCH ₂ CH ₂ OR		C	C	C	X	B	A	C	A		A	A	A ^{100°}	A	A
Cellulose Acetate C ₈ H ₁₂ O ₅		B	B			C	A		B	B	A	A			
Cellulube® Hydraulic Fluids (Phosphate Esters)		X	X	A	C	B	A	X	A	A	A	A			
Chlorinated Lime—35% Bleach CA(ClO) ₂	X	X	C	A	6%A	A	A	X		X	A				
Chlorinated Water		C	C		X	A	A		C		B	A	B	X	A
Chlorine, Dry Cl ₂		C	C		X	A	A	C	X	X			X	X	A
Chlorine, Wet Cl ₂ /H ₂ O	X	X	C	X	X	A	A	C	B	C	A	A	X	X	A
Chlorine, Anhydrous Liquid Cl ₂		X	X			A	A	X	X	X	X	A	X		A
Chlorine Dioxide ClO ₂		X	X	C		B	A	X	B		X	B	X		A
Chlorine Trifluoride ClF ₃	X	X	X	X		B	A	X	A		A		X		
Chloroacetic Acid (Monochloroacetic Acid) ClCH ₂ COOH	X	C	X	B	X	C	A		X	X	X	A	A	X	A
Chloroacetone (Monochloroacetone) ClCH ₂ COCH ₃		C	X	A		C	A	C	X	B	B	B	X		
Chlorobenzene (Monochlorobenzene) C ₆ H ₅ Cl	X	X	X	X	X	A	A	C	X	B	B	B	X	A	A ^{150°}

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

CHEMICAL Formula	ELASTOMERS								METAL PARTS				PLASTICS		
	POLYURETHANE	NEOPRENE	BUNA-N	E.P.D.M.	HYTREL®	(V)FKM FLUOROCARBON	PTFE, PFA	(TPE XL) SANTOPRENE®	ALUMINUM	CAST IRON/STEEL	STAINLESS STEEL	HASTELLOY	POLYPROPYLENE	ACETAL	PVDF
Chlorobutadiene (Chloroprene) C ₄ H ₅ CL		X	X	X		A	A	C	X	B	B	B	X		
Chlorobromomethane ClCH ₂ Br		X	X			A	A	X	X	B	B		X		
Chloroform CHCl ₃	X	X	X	X	X	A	A	X	X	A	A	A	X	B	A
1-Chloronaphthalene C ₁₀ H ₇ Cl		X	X	X		C	A	X	X	B	B	A	X		
Chlorosulfonic Acid HSO ₃ CL	X	X	X	X	X	X	A	A	B	B	B	A	X	X	X
o-Chlorophenol C ₆ H ₅ ClO		X	X	X		B	A		B	B	B	B		B	A
Chlorothene® (Chlorinated Solvents) CH ₃ CCl ₃		X	X			C	A	A	X	X	A	A			
Chlorotrifluoroethylene C ₂ H ₂ ClF ₃			X				A		B	B	B	B			
Chlorox®		B	C			A	A	B		X	A	B	B		
Chocolate Syrup Corn syrup, water, sugar		A	A				A	A		X	A		A		
Chromic Acid — To 10% H ₂ CrO ₄		X	X	A	X	A	A	X	10%B	B	X	B	X	X	A ^{120°}
Chromic Acid — 25%-50% H ₂ CrO ₄	X	X	X	C	X	A	A	X	X	B	X	B	A	X	A ^{120°}
Chromic Acid — Over 50% H ₂ CrO ₄	X	X	X	C	X	A	A	X	X	B	X	B	X	X	A ^{120°}
Cider (Apple Juice) Sucrose, water		A	A		B	A	A	A	B	X	A	A			
Cinnamon Oil Cinnamic acid esters		C					A	C		X	A				
Citric Acid C ₆ H ₈ O ₇ • H ₂ O	A	A	B	A	A	A	A	A	B	X	30%A	A	B	B	A ^{250°}
Citric Oils Citric acid esters		X	C	B		A	A	C		X	A		A		
Citrus Pectin Liquor		A	A			A	A				A				
Clove Oil (Eugenol) C ₁₀ H ₁₂ O ₂		C					A	C		X	A				
Cobalt Chloride CoCl ₂ • 6H ₂ O	X	A	A	C		A	A	A	X				A		
Coconut Oil (Coconut Butter) Fatty acid mixture	A	B	B	A		A	A	B	B	A	A				
Cod Liver Oil (Fish Oil) Glycerides, acids, esters	A	B	B	A		A	A	C	A	X	A				
Coffee Fatty oils, acids, cellulose, water		A	A				A	A	A		A	A	A		
Coke Oven Gas H ₂ (53%),CH ₄ (26%) N ₂ (11%),CO(7%)& hydrocarbons (3%)		C	C			A	A	B							A

Rating specific to % of concentration. Temperature shown is °F. Where not shown, temperature is 70°F (21°C) Ambient.

CHEMICAL Formula	ELASTOMERS								METAL PARTS				PLASTICS		
	POLYURETHANE	NEOPRENE	BUNA-N	E.P.D.M.	HYTREL®	(V) FKM FLUOROCARBON	PTFE, PFA	(TPE XL) SANTOPRENE®	ALUMINUM	CAST IRON/STEEL	STAINLESS STEEL	HASTELLOY	POLYPROPYLENE	ACETAL	PVDF
Copper Acetate $\text{Cu}(\text{C}_2\text{H}_3\text{O}_2)_2 \bullet \text{CuO} \bullet 6\text{H}_2\text{O}$		C	B	A			A	A	X	90%A	10%B	10%B			A
Copper Chloride $\text{CuCl}_2 \bullet 2\text{H}_2\text{O}$	A	A	A	A	A	A	A	A	X	X	X	40%B	A		A
Copper Cyanide CuCN	A	A	A	A		A	A	A	X	A	10%A	A ^{170°}	A		A
Copper Fluoroborate			A	B					A	X	X	X	B		
Copper Nitrate Hexahydrate $\text{Cu}(\text{NO}_3)_2 \bullet 6\text{H}_2\text{O}$		A	A	A		A	A		X	X	A	B	A	A	A
Copper Sulfate (Blue Copperas) $\text{CuSO}_4 \bullet 5\text{H}_2\text{O}$	A	A	A	A	A	A	A	5%A	X	X	10%A	A	A	A	A
Copper Sulfide CuS			A			A	A								
Corn Oil (Maize oil) Glycerides of fatty acids	A	C	A	C	A	A	A	B	B	C	B		A		A
Cotton Seed Oil		A	C	A	A	A	A	A	B	A	C	A		A	B
Cream			C	A				A	A		X	A		A	
Creosote, Coal-Tar (Tar Oil) Hydrocarbon mixture	B	C	A	X	X	A	A	B	B	B	B	B	X	X	
Creosote, Wood-Tar Mixture of phenols		B	A	X	X	A	A				B		X	X	
Cresylic Acid (Cresol) $\text{C}_8\text{H}_{10}\text{O}_2$	X	X	C	X		A	A	B	B	C	A	B	X	X	A ^{150°}
Crotonaldehyde $\text{CH}_3\text{CHCHCHO}$		A	X			A	A		A	A	A	A			
Cumene (Isopropylbenzene) $\text{C}_6\text{H}_5\text{CH}(\text{CH}_3)_2$		X	X	X		A	A		B	B	B	B			
Cutting Oil (Water Soluble)		X	C			A	A		A	A	A	A			
Cutting Oil (Sulfur Base)		C	A				A		A	A	A	A			
Cyclohexane C_6H_{12}	C	X	B	X	A	A	A	C	B	B	B	B	X	A	A
Cyclohexanol $\text{C}_6\text{H}_{11}\text{OH}$		A	B	X		A	A	B	C	B	A	A	B	A	A ^{150°}
Cyclohexanone $\text{C}_6\text{H}_{10}\text{O}$		X	X	C		X	A	C	B	B	B	B	X	A	A
Cyclopentane C_5H_{10}		A	B	X		A	A		B	B	B	B			
Cymene (Isopropyltoluene) $\text{C}_{10}\text{H}_{14}$		X	C	X		A	A								
Decahydronaphthalene (Decalin®) $\text{C}_{10}\text{H}_{18}$	X	X	X	X		A	A								
Decanal $\text{CH}_3(\text{CH}_2)_8\text{CHO}$			X	X		X	A								
Decane $\text{CH}_3(\text{CH}_2)_8\text{CH}_3$	C	X	B	C		A	A	C					A ^{70°}		A
Decyl Alcohol (Decanol) $\text{C}_{10}\text{H}_{21}\text{OH}$		X	A			B	A								

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

CHEMICAL Formula	ELASTOMERS								METAL PARTS				PLASTICS		
	POLYURETHANE	NEOPRENE	BUNA-N	E.P.D.M.	HYTREL®	(V)FKM FLUOROCARBON	PTFE, PFA	(TPE XL) SANTOPRENE®	ALUMINUM	CAST IRON/STEEL	STAINLESS STEEL	HASTELLOY	POLYPROPYLENE	ACETAL	PVDF
Denatured Alcohol Ethanol and denaturant	X	B	A	A		B	A	B	B	B	A	A	A		A
Detergent Solutions	X	A	A	A	B	A	A	B	B		A		A	A	
Developing Fluids & Solutions	X	A	A	C	X	A	A	A		X	A	A			
Dextrose C ₆ H ₁₂ O ₆	A	B	B	A	B ^{140°}	A	A		A	X	A	A	A		A
Diacetone Alcohol (Diacetone) (CH ₃) ₂ COHCH ₂ • COCH ₃	C	X	X	B	C	X	A	B	A	A	A	A	X	A	C
Dibenzyl Ether (C ₆ H ₅ CH ₂) ₂ O	C	X	X	C		C	A	C	B	B	B	B			C
Dibenzyl Sebecate C ₂₄ H ₃₀ O ₄	X	X	X	C	A	B	A	C							
Dibutyl Amine (C ₄ H ₉) ₂ NH		X	C	X		X	A	B		A	A	A	X		B ^{70°}
Dibutyl Phthalate (DBP) C ₆ H ₄ (CO ₂ C ₄ H ₉) ₂	C	X	X	A	A	B	A	B	A	A	A	A	X		X
Dibutyl Sebecate (DBS) C ₁₈ H ₃₄ O ₄	X	X	X	C		C	A	B		A	A		C		
Dichloroacetic Acid Cl ₂ CHCOOH		X	X			X	A								
o-Dichlorobenzene C ₆ H ₄ Cl ₂	X	X	X	X	X	A	A	X	X	B	B	A	B		A ^{150°}
Dichlorobutane C ₄ H ₈ Cl ₂			X			A	A		X	B	B				
Dichloroethyl Ether [ClCH ₂ CH ₂) ₂ O			X				A		B						
Dichloro Isopropyl Ether C ₆ H ₁₂ OCl ₂	C	X	X	X		X	A	X					X		
Dicyclohexylamine (C ₆ H ₁₁) ₂ NH		X	X	X		B	A	B							
Diesel Oil (Fuel ASTM #2) Hydrocarbons	C	C	A	X	B	A	A	C	A	A	A	A	B		A
Diester Synthetic Oils	X	X	B	X		A	A		A	A	A	A			
Diethano Amine (HOCH ₂ CH ₂) ₂ NH	C	A	B				A			A	A	A	A		
Diethyl Amine (CH ₃ CH ₂) ₂ NH	C	C	C	C		X	A		B	B	A	A	A		A
Diethyl Benzene C ₆ H ₄ (C ₂ H ₅) ₂	X	X	X	X		A	A	C							
Diethyl Carbonate (C ₂ H ₅ O) ₂ CO		X	X				A			A					
Diethyl Ether (Ether) (CH ₃ CH ₂) ₂ O	A	C	B	X	C	X	A	B	B	A	A	A	X	A	A
Diethyl Phthalate (DEP) C ₆ H ₄ (CO ₂ C ₂ H ₅) ₂			X			C	A		A	A	A	A			
Diethyl Sebecate C ₁₄ H ₂₆ O ₄		X	X	C	A	B	A	B	A	A	A	A	A ^{120°}		A ^{120°}
Diethylene Ether (Dioxane) C ₄ H ₈ O ₂		X	X	A		X	A		A	A	A				

Rating specific to % of concentration. Temperature shown is °F. Where not shown, temperature is 70°F (21°C) Ambient.

CHEMICAL Formula	ELASTOMERS								METAL PARTS				PLASTICS		
	POLYURETHANE	NEOPRENE	BUNA-N	E.P.D.M.	HYTREL®	(VT) FKM FLUOROCARBON	PTFE, PFA	(TPE XL) SANTOPRENE®	ALUMINUM	CAST IRON/STEEL	STAINLESS STEEL	HASTELLOY	POLYPROPYLENE	ACETAL	PVDF
Diethylene Glycol (DEG) HOCH ₂ CH ₂ OCH ₂ • CH ₂ OH	X	A	A	A	A	A	A	A	A	A	A	A	A		
Diethylene Triamine (NH ₂ C ₂ H ₄) ₂ NH			B						A	A	A	A			
Diisobutyl Ketone C ₄ H ₉ COC ₄ H ₉		X	X	B		X	A		A	A	A	A			
Diisobutylene [HC=C(CH ₃) ₂] ₂		C	B			C	A	C					A		A
Diisodecyl Adipate (DIDA) C ₂₆ H ₅₀ O ₄			X			C	A								
Diisodecyl Phthalate (DIDP) C ₂₈ H ₄₇ O ₄		X	X	A		C	A								
Diisooctyl Adipate (DIOA) C ₂₂ H ₄₂ O ₄			X			C	A		A	A	A	A			
Diisooctyl Phthalate (DIOP) C ₂₄ H ₃₉ O ₄			X			C	A								
Diisooctyl Sebecate (DIOS) C ₂₆ H ₄₆ O ₄				B		A	A								
Diisopropyl Amine [(CH ₃) ₂ CH] ₂ NH			B				A								
Diisopropyl Benzene C ₆ H ₄ • [CH(CH ₃) ₂] ₂		X	X	X		A	A	C							
Diisopropyl Ketone [(CH ₃) ₂ CH] ₂ CO		X	X	A		X	A	C			A				
N,N-Dimethylaniline C ₆ H ₅ N(CH ₃) ₂		X	X	C		X	A	B	B	B			X		A
Dimethyl Ether CH ₃ OCH ₃		B	A			A	A		B	B	B	B			
N,N-Dimethyl Formamide (DMF) HCON(CH ₃) ₂		X	C		C	X	A	A	A		A	A	A ^{120°}	B	A ^{120°}
Dimethyl Phthalate C ₆ H ₄ (CO ₂ CH ₃) ₂		X	X	C	A	C	A	A							A ^{70°}
Dimethyl Sulfate (CH ₃) ₂ SO ₄			X			X	A			A					
Dimethyl Sulfide (CH ₃) ₂ S			X				A		A	A	A	A			
Dinitrotoluene (DNT)CH ₃ C ₆ H ₃ (NO ₂) ₂		X	X	X		C	A	B			A				
Diocetyl Phthalate (DOP) C ₂₄ H ₃₈ O ₄	X	X	X	B	A	B	A	C	A	A	A	A			
Diocetyl Sebecate C ₂₆ H ₅₀ O ₄	C	X	X	C		C	A	C	A	A	A	A			
Dioxolanes (Dioxolans) Glycol ethers		X	X	B		C	A	C							
Dipentene (Limonene) C ₁₀ H ₁₆		X	C	X		A	A	C	A	A	A	A			
Diphenyl Oxides (Phenyl Ether) C ₆ H ₅ OC ₆ H ₅	C	X	X	C		A	A	C	B	A	A	A			A
Dipropylamine (CH ₃ CH ₂ CH ₂) ₂ NH			B				A								

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

CHEMICAL Formula	ELASTOMERS								METAL PARTS				PLASTICS		
	POLYURETHANE	NEOPRENE	BUNA-N	E.P.D.M.	HYTREL®	(VT)FKM FLUOROCARBON	PTFE, PFA	(TPE XL) SANTOPRENE®	ALUMINUM	CAST IRON/STEEL	STAINLESS STEEL	HASTELLOY	POLYPROPYLENE	ACETAL	PVDF
Dipropylene Glycol (C ₃ H ₆ OH) ₂ O			A			A	A						A		A
Dipropyl Ketone (Butyrone) (C ₃ H ₇) ₂ CO			X				A								
Dispersing Oil #10		X	X	X		C	A		A	A	A	A			
Divinyl Benzene (DVB) C ₆ H ₄ (CH=CH ₂) ₂			X			A	A								
Dodecyl Benzene (Alkane) C ₆ H ₅ (CH ₂) ₁₁ CH ₃			X			A	A		A	A	A				
Dow Corning® (Silicones) [(CH ₃) ₂ SiO] ₂	A	A	A			A	A		A						
Dowtherm®(Biphenyl & Phenyl Ether) (C ₆ H ₅) ₂ and (C ₆ H ₅) ₂ O	C	X	X	X		A	A	X	A	B	A	A			
Drycleaning Fluids Chlorinated hydrocarbons		X	C			A	A	X	A	A	A		X		
Dyes			C						B	B		A			
Epichlorohydrin C ₃ H ₅ ClO		X	X	B	X	X	A	B	X	A	A	A	A	A	X
Epsom Salts (Magnesium Sulfate) MgSO ₄ • 7H ₂ O		A	A			A	A	A	A		A	B	A		A
Ethane C ₂ H ₆	C	C	A	X		A	A	C	A	A	A	A	C	A	
Ethanolamine (Aminoethanol) H ₂ NCH ₂ • CH ₂ OH	X	C	B	B		X	A	A	B	A	A		X	X	C
Ethyl Acetate CH ₃ COOC • H ₂ CH ₃	X	X	X	B	C	X	A	C	A	A	A	A	C	A	A
Ethyl Acetoacetate (Acetoacetic Ester) CH ₃ COCH ₂ • COOCH ₂ CH ₃	C	X	X	C		X	A	C	A	A	A	A			A ^{70°}
Ethyl Acrylate CH ₂ CHCO ₂ • CH ₂ CH ₃	X	X	X	C		X	A	C	A	A	A	A	B		B ^{70°}
Ethyl Alcohol (Ethanol) CH ₃ CH ₂ OH	X	A	A		X	B	A		B	B	A	A	A ^{100°}		A
Ethyl Aluminum Dichloride CH ₃ CH ₂ AlCl ₂			X			B	A								
Ethyl Amine (Monoethylamine) CH ₃ CH ₂ NH ₂		C	X	A		X	A		B	B	A				
Ethyl Benzene CH ₃ CH ₂ C ₆ H ₅	X	X	X	X		A	A	C	B	B	B	A	X	A	A
Ethyl Benzoate C ₆ H ₅ CO ₂ CH ₂ CH ₃		X	X	C		A	A	C	A	A	A	A	B		
Ethyl Bromide (Bromoethane) CH ₃ CH ₂ Br		B	X	B			A	X	A	A	A				
Ethyl Butyl Acetate CH ₃ CO ₂ CH ₂ • CH(C ₂ H ₅) ₂			X			X	A								
Ethyl Butyl Alcohol CH ₃ CH(C ₂ H ₅) • (CH ₂) ₂ OH			A			B	A								
Ethyl Butyl Ketone CH ₃ CH ₂ COC ₄ H ₉			X			X	A								

Rating specific to % of concentration. Temperature shown is °F. Where not shown, temperature is 70°F (21°C) Ambient.

CHEMICAL Formula	ELASTOMERS								METAL PARTS				PLASTICS		
	POLYURETHANE	NEOPRENE	BUNA-N	E.P.D.M.	HYTREL®	(VT) FKM FLUOROCARBON	PTFE, PFA	(TPE XL) SANTOPRENE®	ALUMINUM	CAST IRON/STEEL	STAINLESS STEEL	HASTELLOY	POLYPROPYLENE	ACETAL	PVDF
Ethyl Butyraldehyde C ₆ H ₁₂ O			X			X	A								
Ethyl Butyrate CH ₃ CH ₂ CH ₂ • C ^{140°} CO ₂ C ₂ H ₅		X	X	X		C	A		B	A	A	A	B		
Ethyl Caprylate CH ₃ (CH ₂) ₆ • CO ₂ C ₂ H ₅			X	X	X										
Ethyl Cellosolve® C ₂ H ₅ O(CH ₂) ₂ OH		C	C	B		X	A	B							
Ethyl Cellulose (Ethocel®)	B	B	B	B	B	C	A	A	B	A	B	B	C		
Ethyl Chloride (Chloroethane) C ₂ H ₅ Cl	C	C	A	A	X	A	A	C	X	B	A	B	X	A	A
Ethyl Chlorocarbonate (Ethyl Chloroformate) ClCO ₂ C ₂ H ₅		C				A	A	A							
Ethyl Cyanide (Propionitrile) C ₂ H ₅ CN		B	X	A		X	A								
Ethyl Formate HCOOCH ₂ CH ₃		B	X	C		A	A	B	B	A	B	B			
Ethylhexyl Acetate CH ₃ CO ₂ CH ₂ • CH(C ₂ H ₅)C ₄ H ₉			X			X	A								
Ethylhexyl Alcohol (Ethylhexanol) C ₈ H ₁₇ OH			A			B	A		A	A	A	A			
Ethyl Iodide CH ₃ CH ₂ I		X	X	C		B	A								
Ethyl Isobutyrate (CH ₃) ₂ • CHCOOCH ₂ CH ₃		X	X	X			A								
Ethyl Mercaptan (Ethanethiol) CH ₃ CH ₂ SH		C	X	X		B	A	C	B	A	B	B			
Ethyl Oxalate C ₂ H ₅ O ₂ C • CO ₂ C ₂ H ₅	A	X	X	A		B	A	B							
Ethyl Pentachlorobenzene C ₂ H ₅ C ₆ Cl ₅		X	X			A	A	X	X				X		
Ethyl Propionate CH ₃ CH ₂ • COOCH ₂ CH ₃		X	X	X			A		A	A	A	A			
Ethyl Silicate Si(OCH ₂ CH ₃) ₄		A	A	A		A	A	B	B	A	A	A			
Ethyl Sulfate C ₂ H ₅ OSO ₂ OH			A			A	A	B			X				
Ethylene (Ethene) C ₂ H ₄		A	B	C		A	A	C	A	A	A				
Ethylene Chlorohydrin ClCH ₂ CH ₂ OH	X	B	X	A	X	B	A	C		B	A	A	X		A ^{70°}
Ethylene Diamine (CH ₂) ₂ (NH ₂) ₂		A	B	A		X	A	A	C	A	A	A	A	A	B
Ethylene Dibromide (Ethylene Bromide) Br(CH ₂) ₂ Br		X	X	C		B	A		X	X	B	B	X		A
Ethylene Dichloride (Dutch Oil) Cl(CH ₂) ₂ Cl	X	X	X	X	X	B	A	X	X	B	B	B	X	B	A

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

CHEMICAL Formula	ELASTOMERS								METAL PARTS				PLASTICS		
	POLYURETHANE	NEOPRENE	BUNA-N	E.P.D.M.	HYTREL®	(V)FKM FLUOROCARBON	PTFE, PFA	(TPE XL) SANTOPRENE®	ALUMINUM	CAST IRON/STEEL	STAINLESS STEEL	HASTELLOY	POLYPROPYLENE	ACETAL	PVDF
Ethylene Glycol (Ethylene Alcohol) (Glycol) $(CH_2OH)_2$	B	A	A	A	A	A ^{70°}	A	A	A	A	A	A	A ^{120°}	A	A
Ethylene Glycol Monobutyl Ether (Butyl Cellosolve®) $C_4H_9OCH_2CH_2OH$	X	X	B	B		C	A		A	A	A	A			
Ethylene Glycol Monoethyl Ether Acetate (Cellosolve Acetate®) $C_2H_5O(CH_2)_2 \bullet O_2CCH_3$	X	X	C	B		C	A		A	A	A	A			
Ethylene Glycol Monomethyl Ether (Methyl Cellosolve®) $CH_3O(CH_2)_2OH$	X	C	C	B		X	A		B	B	A	A			
Ethylene Oxide $(CH_2)_2O$	X	X	X	X	A	C	A	A	A	B	A	A	C		A
Ethylene Trichloride (Trichloroethene) C_2HCl_3		X	X	X		A	A	X	X	A	A		X		
Ethylidene Chloride CH_3CHCl_2		X	X	X			A		X	B	A	B			
Fatty Acids $C_nH_{2n+1}COOH$		C	B	X	B	A	A	B	90%A	X	A	A	B	A	A
Ferric Chloride $FeCl_3$	A	A	A	A	X	A	A	A	X	X	X	10%A	A	A	A
Ferric Hydroxide $FeHO_2$			B			C	A				A	10%B			
Ferric Nitrate $Fe(NO_3)_3$	A	A	A	A		A	A	A	X	X	B	10%A	A	A	A
Ferric Sulfate $Fe_2(SO_4)_3$		A	A	A		A	A	A	C	X	B	30%A	A	B	A
Ferrous Chloride $FeCl_2$		A	A	A	X	A	A	A	X	X	30%B	50%B	A	B	A
Ferrous Sulfate $FeSO_4$		A	A	A	A	A	A	A	10%A	C	B	30%A	A	B	A
Fish Oil			A			A	A	B							
Fluoboric Acid (Fluoroboric Acid) HF_4		B	A	A	X	C	A	A	X	X	30%A		A		A
Fluorine (Liquid) F_2		C	X	C	X	B	A	X	A		A		X		A ^{70°}
Fluorobenzene FC_6H_5		X	X	X		A	A	C					X		
Fluorolube (Fluorocarbon Oils) $F_xC_yH_z$		A	C	A		B	A	X	A	A	A	A	X		
Fluosilicic Acid (Sand Acid) H_2SiF_6	B	A	B	B	B	A	A	A	X	X	A ^{212°}	B	A		A
Formaldehyde (Formalin) HCHO	X	C	B	A	40%C	A	A	B	A	C	90%A	70%A	A	A	A ^{120°}
Formamide HCONH ₂		A	A	A		X	A		A	B	B	B			
Formic Acid HCOOH	X	B	C	B	C	C	A	A	X	X	C	A	A ^{70°}	X	A

Rating specific to % of concentration. Temperature shown is °F. Where not shown, temperature is 70°F (21°C) Ambient.

CHEMICAL Formula	ELASTOMERS								METAL PARTS				PLASTICS		
	POLYURETHANE	NEOPRENE	BUNA-N	E.P.D.M.	HYTREL®	(V) FKM FLUOROCARBON	PTFE, PFA	(TPE XL) SANTOPRENE®	ALUMINUM	CAST IRON/STEEL	STAINLESS STEEL	HASTELLOY	POLYPROPYLENE	ACETAL	PVDF
Freon 11 (Trichlorofluoromethane) CCl ₃ F	X	C	C	X	A	B	A	X	B	A	A		B		A
Freon 12 (Dichlorodifluoromethane) Cl ₂ CF ₂	A	B	B	B	A	B	A	X	A	A	A				A
Freon 13 (Chlorotrifluoromethane) ClCF ₃		A	A	A	C	A	A	X	A	A	A	A			
Freon 13B1 (Bromotrifluoromethane) BrCF ₃	A	A	A	A		A	A								
Freon 14 (Tetrafluoromethane) CF ₄		X	X	B			A								
Freon 21 (Dichlorofluoromethane) FCHCl ₂		B	X	X		X	A	X	A						A
Freon 22 (Chlorodifluoromethane) HCClF ₂	X	B	X	C	X	X	A	X	A	A	A	A			A
Freon 113 (Trichlorotrifluoroethane) (TF) Cl ₃ CCF ₃	C	A	B	X	A	B	A	X	B		A				A
Freon 114 (Dichlorotetrafluoroethane) C ₂ Cl ₂ F ₄	A	A	A	C	A	A	A	X	B		A				A
Freon 114B2 (Dibromotetrafluoroethane) C ₂ Br ₂ F ₄		A	B	X		B	A	X							
Freon 115 (Chloropentafluoroethane) C ₂ ClF ₅		A	A	A		B	A	X	A						
Fruit Juices Water, sucrose		A	A	A	B	A	A	A	0%A	X	A	A	A		A
Fuel Oils (ASTM #1 thru #9) Hydrocarbons	C	C	A	X	B	A	A	C	A	A	A	A	C	C	A
Fumaric Acid (Boletic Acid) HOOCCH = CHCOOH		B	C			A	A	A							
Furan (Furfuran) C ₄ H ₄ O		X	X	X	X	C	A	C					C		X
Furfural (Ant Oil) C ₅ H ₄ O ₂	X	B	X	B		C	A	C	A	B	20%A	B	X	B	B ^{120°}
Furfuryl Alcohol C ₅ H ₆ O ₂	X		X	B	B	X	A		A	A	A	A			B ^{100°}
Fusel Oil (Grain Oil) (CH ₃) ₂ • CHCH ₂ CH ₂ OH	C	A	A	A		A	A								
Gallic Acid C ₆ H ₂ (OH) ₃ • COOH	X	C	B	B	X	A	A	B	20%A	X	B	B	A ^{70°}		A ^{70°}
Gasoline (Unleaded) C ₄ to C ₁₂ • Hydrocarbons	X	X	X	X		A	A	C	A	A	A	A	C	A	A
Gasoline (Petrol) Hydrocarbons	B	C	A	X	A	A	A	C	A	A	A	A	C	A	A
Gelatin Water soluble Proteins	A	A	A	A	B	B	A	A	A	A	A		A	B	A
Ginger Oil C ₁₇ H ₂₆ O ₄		A				A	A	C		X	A				

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

CHEMICAL Formula	ELASTOMERS								METAL PARTS				PLASTICS		
	POLYURETHANE	NEOPRENE	BUNA-N	E.P.D.M.	HYTREL®	(V)FKM FLUOROCARBON	PTFE, PFA	(TPE XL) SANTOPRENE®	ALUMINUM	CAST IRON/STEEL	STAINLESS STEEL	HASTELLOY	POLYPROPYLENE	ACETAL	PVDF
Glauber's Salt (Sodium Sulfate Decahydrate) $\text{Na}_2\text{SO}_4 \cdot 10\text{H}_2\text{O}$	A	A	A	B	B	A	A								
Gluconic Acid $\text{C}_6\text{H}_{12}\text{O}_7$			C			A	A		B	C	50%A		A		
Glucose (Corn Syrup) $\text{C}_6\text{H}_{12}\text{O}_6$	A	A	A	A	B	A	A	A	A	A	A		A	A	A
Glue (PVA)	A	A	A	B	B	A	A	A	A	A	B	A	A	B	
Glycerol (Glycerine) $\text{C}_3\text{H}_8\text{O}_3$	A	A	A	A	A	A	A	A	A	B	A	A	A	A	A
Glycolic Acid HOCH_2COOH		A	A			A		A				A	A		A
Glycols		A	A			A	A	A	B	B	B		A	A	A
Gold Monocyanide AuCN		A	A			A		A			X	A			
Grape Juice Water, sucrose		X	C			A	A	A		X	A		A		A
Grapefruit Oil	A	X	X				A			X	A				
Grease Hydrocarbons		X	A		A	A	A	B	A		A				
Green Sulfate Liquor		B	B	A	X	A	A	A	B	C	A	B	A		
Halowax Oil Chlorinated naphthalenes		X	X	X		A	A	X	X						
Heptanal $\text{CH}_3(\text{CH}_2)_5\text{CHO}$			A			A			A	A	A	A	A		
Heptane C_7H_{16}	B	C	A	X		A	A	C	A	A	A	A	C ^{140°}	A	A
Hexanal $\text{CH}_3(\text{CH}_2)_4\text{CHO}$	C	A	X	B		C	A		A	B	A	B			
Hexalin (Cyclohexanol) $\text{C}_6\text{H}_{11}\text{OH}$		A	B	C		A	A								
n-Hexane C_6H_{14}	B	B	A	X	A	A	A	A	A	A	A	A	C ^{140°}	C	A
n-Hexane 1 (Hexylene) $\text{H}_2\text{CCH}(\text{CH}_2)_3\text{CH}_3$	A	B	A	X		A	A	C							
Hexyl Alcohol (1-Hexanol) $\text{C}_6\text{H}_{13}\text{OH}$	X	B	A	C		A	A		A	A	A				A
Hexylene Glycol (Brake Fluid) $\text{C}_6\text{H}_{12}(\text{OH})_2$		A	A	C		A	A		A	A	A	A			
Honey		A					A	A	A	A	A		A		
Hydraulic Oil (Petroleum Base) Hydrocarbons	A	B	A	X	X	A	A	X	A	A	A	A	X	C	
Hydrazine (Diamine) H_2NNH_2	X	C	C	A	X	X	A	A	A	X	A	A	X	B	X
Hydrobromic Acid HBr	X	C	X	A		A	A	B	A	A	A		B	X	A
Hydrochloric Acid 10% (Muratic) HCl	B	B	B	A		A	A	A	X	C	X	B	A	X	A
Hydrochloric Acid 20% (Muratic) HCl	B	B	B	A	C	A	A	A	X	C	X	A	A	X	A

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CHEMICAL Formula	ELASTOMERS								METAL PARTS				PLASTICS		
	POLYURETHANE	NEOPRENE	BUNA-N	E.P.D.M.	HYTREL®	(VT) FKM FLUOROCARBON	PTFE, PFA	(TPE XL) SANTOPRENE®	ALUMINUM	CAST IRON/STEEL	STAINLESS STEEL	HASTELLOY	POLYPROPYLENE	ACETAL	PVDF
Hydrochloric Acid 30% (Conc.) HCl	X	C	C	A	X	B	A		X	X	X	A	B	X	A
Hydrocyanic Acid (Formonitrile) HCN	C	C	B	A	X	A	A	B	10%A	X	A	B	A	X	A
Hydrogen Fluoride — Anhydrous HF	C	C	X	C		A	A		X		X	A	A		A
Hydrofluoric Acid (Conc.) Cold HF *SEE NOTE BELOW	X	C		C	X	B	A	X	C	X	X	B	40%A	X	A
Hydrogen Peroxide — 3% H ₂ O ₂		B	B	B	X	A	A	A	A				A		A
Hydrogen Peroxide — 10% H ₂ O ₂		C	C	B	X	A	A		A	B	A	A	A		A
Hydrogen Peroxide — 30% H ₂ O ₂		X	C	B	X	A	A		A	X	B	A	A		A
Hydrogen Peroxide — 90% H ₂ O ₂	C	B	X	C	X	A	A		A	X	A				
Hydrogen Sulfide (Wet) H ₂ S		C	X	A	A	X	A	A	90%A	X	A ^{167°}	A ^{167°}	A	C	A
Hydroquinone C ₆ H ₄ (OH) ₂		X	C			C	A	A	90%A	B	10%A	B			A
Hydroxyacetic Acid — 10% HOCH ₂ COOH		X	X				A	70%A	B		B				
Hypochlorous Acid HClO		X	X	B		A	A	A	X	X	X	A	A		A
Ink	A	A			A			C	X	A	A				
Iodine I ₂		B	B	B	B	A	A	A	A	X	X	A	A		A ^{150°}
Iodoform CHI ₃				A			A	B	A	A	A	A			A
Isoamyl Acetate CH ₃ CO ₂ CH ₂ CH ₂ CH • (CH ₃) ₂	X	X	X	B		X	A		A	A	A	A			
Isoamyl Alcohol (CH ₃) ₂ • CHCH ₂ CH ₂ OH	C	A	A	A		A	A								
Isoamyl Butyrate C ₉ H ₁₈ O ₂			X			X	A		A	A	A	A			
Isoamyl Chloride (CH ₃) ₂ CHCH ₂ CH ₂ Cl		X	X	X		A	A		X						
Isobutyl Acetate CH ₃ CO ₂ CH ₂ • CH(CH ₃) ₂		X	X	C		X	A		A	A	A	A			
Isobutyl Alcohol (Isobutanol) (CH ₃) ₂ • CHCH ₂ OH	X	B	B	A		A	A		A				A	A	A
Isobutyl Amine (CH ₃) ₂ • CHCH ₂ NH ₂			X			X	A								
Isobutyl Chloride (CH ₃) ₂ • CHCH ₂ Cl			X			B	A		X	B	B	90%A			
Isobutyric Acid (CH ₃) ₂ • CHCOOH		B	X	A			A		A						
Isododecane (CH ₃) ₂ • CH(CH ₂) ₆ CH ₃	B	A	B	X		A	A		B	B	B	B			

*NOTE: Glass-filled Polypropylene pump components are not compatible with Hydrofluoric Acid. Please consult factory for specific details..

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

CHEMICAL Formula	ELASTOMERS								METAL PARTS				PLASTICS		
	POLYURETHANE	NEOPRENE	BUNA-N	E.P.D.M.	HYTREL®	(VT) FKM FLUOROCARBON	PTFE, PFA	(TPE XL) SANTOPRENE®	ALUMINUM	CAST IRON/STEEL	STAINLESS STEEL	HASTELLOY	POLYPROPYLENE	ACETAL	PVDF
Isooctane (Trimethylpentane) C ₈ H ₁₈	B	B	A	X	A	A	A	C	A	A	A	A	A		A
Isopentane (CH ₃) ₂ CHCH ₂ CH ₃			A			A	A								
Isophorone C ₉ H ₁₄ O	C	X	X	C		X	A	B	A	A	A	A			
Isopropyl Acetate CH ₃ COOCH ₂ (CH ₃) ₂	A	X	X	B		X	A	B	A	A	A	A	B		
Isopropyl Alcohol (Isopropanol) CH ₃ CH(OH)CH ₃	X	A	B	B	A	A	A		90%A	A	A	A	A	A	A
Isopropyl Amine C ₃ H ₇ NH ₂			X			X	A			A	A				
Isopropyl Chloride (CH ₃) ₂ CHCl	X	X	X	X		B	A	C	X	A	A	A	X		
Isopropyl Ether (CH ₃) ₂ CHOCH • (CH ₃) ₂	C	C	C	X		C	A	C	B		A		X		A ^{70°}
Jet Fuels (JP1 to JP6) (ASTM-A, A1 & B)	C	C	A	X	A	A	A	C	A	A	A	A	X	A	A
Kerosene (Kerosene) Hydrocarbons	C	C	A	X	A	A	A	C	A	A	A	A	X	A	A
Lacquers	X	X	X	X	X	X	A	C	A	B	A	A		B	
Lacquer Solvents	X	X	X	X	C	X	A	C	A	B	A	A	C	B	X
Lactic Acid CH ₃ CHOH • COOH		B	B	A	X	A	A	A	A	X	70%A	60%A	A	C	A
Lactol (Aliphatic Naptha Solvent) CH ₃ CHOH • CO ₂ C ₁₀ H ₇		X	C			A	A		A	A	A	A			
Lard (Lard Oil) Olein, stearin	A	C	A	X	B	A	A	B	A	A	B	A	A	B	A
Latex Rubber emulsion		A	A				A		A		A		A	C	
Lauryl Alcohol (n-Dodecanol) CH ₃ (CH ₂) ₁₀ • CH ₂ OH			A			B		A	A	A	A	A			
Lavender Oil Ester mixture		X	B	X		B	A	B							
Lead Acetate (Sugar of Lead) Pb(CH ₃ CO ₂) ₂	X	A	B	A		X	A	A	X		B	B	A	A	A
Lead Chloride PbCl ₂		B					A		X		B	B	A		A
Lead Nitrate Pb(NO ₃) ₂		A	B	A		A	A		X	B	B	B	A		A
Lead Sulfamate			A	B					A					A	
Lemon Oil (Cedro Oil) Hydrocarbons			C						C	A		A			
Ligroin (Ligroine) (Benzine) Petroleum fraction		B	A	X		A	A	B		A	A		X		
Lignin Liquor Blend of natural aromatic oils		A	A			A	A				A				

Rating specific to % of concentration. Temperature shown is °F. Where not shown, temperature is 70°F (21°C) Ambient.

CHEMICAL Formula	ELASTOMERS							METAL PARTS				PLASTICS			
	POLYURETHANE	NEOPRENE	BUNA-N	E.P.D.M.	HYTREL®	(V)FKM FLUOROCARBON	PTFE, PFA	(TPE XL) SANTOPRENE®	ALUMINUM	CAST IRON/STEEL	STAINLESS STEEL	HASTELLOY	POLYPROPYLENE	ACETAL	PVDF
Lime, Soda (Slaked Lime & Soda Ash) CaO	C	B	B	A		B	A	A							
Lime Bleach		C	A	A		A	A	A	X				B		
Lime Slurries		A	B		C	B	A		B		B				
Lime Sulfur CaS+CaSO ₄		A	A	A		A	A	B	X		A		A		
Limonene C ₁₀ H ₁₆		X	C	X		A	A								
Linoleic Acid C ₁₈ H ₃₂ O ₂		X	B	X		B	A	B	A		A	A	A		A
Linseed Oil (Flaxseed Oil) Glycerides	B	A	A	C	B	A	A	B	A	A	A	A	A	A	A
Lindol (Tritolyl Phosphate) C ₂₁ H ₂₁ O ₄ P		C	X			B	A	A							
Lithium Bromide LiBrH ₂ O		X	A			A	A			A					A
Lubricating Oils (Petroleum) Hydrocarbons	C	B ^{150°}	A	X	A	A	A	X	A	A	A	A	C	A	A
Lye (Potassium Hydroxide) KOH		B	C		C	B	A	A			A		A	X	A ^{150°}
Magnesium Carbonate MgCO ₃		A	A	C	A	A	A	A	A	B	B	B	A	A	A
Magnesium Chloride MgCl ₂ O	A	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	A	B	B	A	C	A	A	A	10%A	A	A	A	A	A	A
Magnesium Nitrate Mg(NO ₃) ₂ • 6H ₂ O		A	A	A		A	A	A	50%B	B	A	B	A		A
Magnesium Oxide MgO		A	A			B	A	A	10%A	A	A	A			
Magnesium Sulfate (Epsom Salts) MgSO ₄ • 7H ₂ O		A	A	A	B	A	A	A	70%A	A	50%A	A	A	A	A
Maleic Acid (CHCOOH) ₂		A	X	X		A	A	A	20%A	60%B	B	A	A		A
Maleic Anhydride C ₄ H ₂ O ₃				X		A	A	A	20%A	B	A	A			
Malic Acid (Apple Acid) C ₄ H ₆ O ₅		C	B	X		A	A	A	B		A	B ^{212°}			
Maple Sugar Liquors (Sucrose) Water, sucrose	X	A	A	A		A	A				A				
Mayonnaise Water, fats, oils		A	A				A	A	X	X	A	A	A		
Mercuric Chloride HgCl ₂		B	A	A		A	A	A	X	X	X	30%B	A	B	A
Mercuric Cyanide Hg(CN) ₂		B	B	A		A	A	A	X	B	B	B	A		A
Mercurous Nitrate Hg ₂ (NO ₃) ₂ • 2H ₂ O		B	B	A		A	A		X	B	B ^{212°}	B	A		A

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

CHEMICAL Formula	ELASTOMERS								METAL PARTS				PLASTICS		
	POLYURETHANE	NEOPRENE	BUNA-N	E.P.D.M.	HYTREL®	(VT) FKM FLUOROCARBON	PTFE, PFA	(TPE XL) SANTOPRENE®	ALUMINUM	CAST IRON/STEEL	STAINLESS STEEL	HASTELLOY	POLYPROPYLENE	ACETAL	PVDF
Mercury Hg	A	A	A	A	A	A	A	A	X	A	A	A	A	C	A
Mesityl Oxide (CH ₃) ₂ C = CHCOCH ₃		X	X	B		X	A	C	A	A	A	A			
Methane CH ₄	C	B	A	X	B	A	A	C	A	A	A	A	B	A	A
Methyl Acetate CH ₃ CO ₂ CH ₃		C	X	C	C	X	A	B	A	A	A	A	C	B	
Methyl Acetoacetate CH ₃ COCH ₂ • COOCH ₃			X			X	A			A	A	A			
Methyl Acrylate CH ₂ CHCO ₂ CH ₃		C		C		X	A	B		A	A				A ^{70°}
Methyl Acrylic Acid (Crotonic Acid) CH ₃ (CH) ₂ COOH		C		C		X	A								
Methyl Alcohol (Methanol) CH ₃ OH	X	A	A	A	A	B	A	A	B	A	A	A	A	A	A
Methyl Amine (Monomethylamine) CH ₃ NH ₂		A	B	A		^{90%} A	A		B	B	A	B	X		C
Methyl Amyl Acetate C ₈ H ₁₆ O ₂			A			X	A		A	A	A	A			
Methyl Amyl Alcohol C ₆ H ₁₃ OH			A			X	A		A	A	A	A			
Methyl Aniline C ₆ H ₅ NH(CH ₃)		A	A	A			A								
Methyl Bromide (Bromo Methane) CH ₃ Br		X	C	A	X	A	A	X	X	A	A	B	X		A
Methyl Butyl Ketone (2-hexanone) CH ₃ COC ₄ H ₉		X	X	B		X	A	C			A		X		
Methyl Butyrate CH ₃ (CH ₂) ₂ • CO ₂ CH ₃		X	X	X			A		A	A	A	A			
Methyl Cellosolve® CH ₃ OCH ₂ • CH ₂ OH		X	X			X	A	B	A				A		A
Methyl Chloride CH ₃ Cl	X	X	X	C	X	B	A	X	X	A	A	A	X	B	A
Methyl Cyclopentane C ₆ H ₁₂		X	B	X		A	A	C			A				
Methyl Dichloride CH ₂ Cl ₂		X	X			A		X	X				X		
Methyl Ethyl Ketone (Butanone) CH ₃ CO • CH ₂ CH ₃	X	X	X	A	C	X	A	B	A	A	A	A	X	B	X
Methyl Formate HCOOCH ₃		B	X	C		X	A	B	A	A	A				
Methyl Hexane C ₇ H ₁₆		A	A	X		A	A								
Methyl Iodide CH ₃ I		X	X	A			A		X	A	A	A			

Rating specific to % of concentration. Temperature shown is °F. Where not shown, temperature is 70°F (21°C) Ambient.

CHEMICAL Formula	ELASTOMERS								METAL PARTS				PLASTICS		
	POLYURETHANE	NEOPRENE	BUNA-N	E.P.D.M.	HYTREL®	(VT) FKM FLUOROCARBON	PTFE, PFA	(TPE XL) SANTOPRENE®	ALUMINUM	CAST IRON/STEEL	STAINLESS STEEL	HASTELLOY	POLYPROPYLENE	ACETAL	PVDF
Methyl Isobutyl Ketone (Hexone) $\text{CH}_3\text{COCH}_2\text{CH}(\text{CH}_3)_2$		X	X	C	X	X	A	C	A	B	B	A	C ^{70°}	A	A ^{70°}
Methyl Isopropyl Ketone $\text{CH}_3\text{COCH}(\text{CH}_3)_2$		X	X	C	X	X	A	C			A		C		A ^{70°}
Methyl Methacrylate $\text{CH}_2\text{C}(\text{CH}_3)\text{CO}_2\text{CH}_3$		X	X	X		C	A	B	B		A				A ^{70°}
Methyl Oleate $\text{C}_{19}\text{H}_{36}\text{O}_2$		X	X	C		B	A	C							
Methyl Propyl Ketone $\text{CH}_3\text{CH}_2\text{CH}_2\text{COCH}_3$		X	X	B		X	A								
Methyl Salicylate (Betula Oil) $\text{HOC}_6\text{H}_4\text{COOCH}_3$		X	X	C		B	A	B	A	A					
Methylacrylic Acid $\text{CH}_3\text{CHCHCO}_2\text{H}$		B				B	A	A							
Methylamine CH_3NH_2		A	B	A		^{90%} A	A	A	B	B	A	B	A		
Methylene Bromide CH_2Br_2		X	X			B	A		X	A	A	A			A
Methylene Chloride CH_2Cl_2	X	X	X	X	X	B	A	X	X	B	^{90%} A	A	X		B ^{100°}
Milk	X	A	B	A	B	A	A	A	A	X	A	A	A	A	A
Mine Water			A				A		B		B	A			
Mineral Oil (Petroleum) Hydrocarbons	A	B	A	X	A	A	A	C	A	A	A	A	B	A	A
Mixed Acids (Sulfuric & Nitric) $\text{H}_2\text{SO}_4, \text{HNO}_3$	X	X	X	B		A	A		X	X	B	B	X		A
Molasses	X	A	A	A	B	A	A	A	A	A	A	A	A	B	A
Monochlorobenzene $\text{C}_6\text{H}_5\text{Cl}$		X	X		C	A	A	C	X	A	A		X	A	A ^{100°}
N-Methyl Aniline $\text{C}_6\text{H}_5\text{NHCH}_3$		X	X			C	A						C		
Monoethanolamine $\text{NH}_2\text{C}_2\text{H}_4\text{OH}$		C	B			C	A	A	B	A	A		X	X	X
Mustard		A	C		B	X	A	A	B	X	A	A	A	A	
Naphtha (Petroleum Spirits) (Thinner) Petroleum fractions	C	X	A	X	A	A	A	C	A	B	A	A	X	A	A
Naphtha Coal Tar (Benzol) Hydrocarbons	X	X	X	X		A	A	A	A	B	A	A			
Naphthalene (Tar Camphor) C_{10}H_8	C	X	X	X	C	A	A	C	B	A	A	A	A	A	A
Naphthoic Acid $\text{C}_{11}\text{H}_8\text{O}_2$			B	X		A	A		B	B	A	B			
Neatsfoot Oil			A	C		A	A	B			A				
Neohexane (2,2-dimethylbutane) C_6H_{14}			A			A	A								
Neosol	X	A	A	B		C	A		B	B	A	A			
Neville Acid		C	C	C		B	A	A							

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

CHEMICAL Formula	ELASTOMERS								METAL PARTS				PLASTICS		
	POLYURETHANE	NEOPRENE	BUNA-N	E.P.D.M.	HYTREL®	(VT)FKM FLUOROCARBON	PTFE, PFA	(TPE XL) SANTOPRENE®	ALUMINUM	CAST IRON/STEEL	STAINLESS STEEL	HASTELLOY	POLYPROPYLENE	ACETAL	PVDF
Nickel Acetate Ni(CH ₃ CO ₂) ₂		B	B	A		X	A	A	10%B		A		A		A
Nickel Chloride NiCl ₂	A	A	A	A	X	A	A	A	X	X	B	80%A ^{200°}	A	B	A
Nickel Nitrate Ni(NO ₃) ₂ • 6H ₂ O		A	A	A		A	A		X		A	B	A		A
Nickel Sulfate NiSO ₄	A	A	A	A		A	A	A	X	X	40%A	B	A	A	A
Nitrana (Ammonia Fertilizer)		B	B			C	A				A				
Nitric Acid — 10% HNO ₃	C	B	X	B	C	A	A	A	A	X	A	A	A		A
Nitric Acid — 25% HNO ₃	C	C	X	B	X	A	A	20%B	X	X	30%A	30%A	A		A
Nitric Acid — 35% HNO ₃	C	X	X	C	X	A	A		X	X	50%A	50%A	B		A
Nitric Acid —50% HNO ₃	C	X	X	X	X	A	A	C	X	X	A	X	C		A
Nitric Acid — 70% HNO ₃	X	X	X	X	X	A	A			X	A	X			A
Nitric Acid (Conc.) HNO ₃	X	X	X	X	X	B	A	C	A	X	A	40%A	X		A ^{120°}
Nitric Acid (Red Fuming)	X	X	X	X	X	B	A	X	A	X	A	B	X		C
Nitrobenzene C ₆ H ₅ NO ₂	X	X	X	X	X	B	A	B	A	A	A	55%B ^{212°}	B	B	A ^{70°}
Nitroethane C ₂ H ₅ NO ₂		C	X	C		X	A	A	A	A	A	A	C		A ^{70°}
Nitrogen Tetroxide N ₂ O ₄		X	X	X	50%B	C	A		A	B	A	A	X		C
Nitromethane CH ₃ NO ₂		C	X	C	X	X	A	A	A	A	A	A	C	A ^{120°}	B
1-Nitropropane CH ₃ (CH ₂) ₂ NO ₂		C	X	A		X	A		A	A	A	A			
Octadecane CH ₃ (CH ₂) ₁₆ CH ₃	A	B	A	X		A	A	B							
n-Octane C ₈ H ₁₈			A	X		A	A	B					X		A
Octyl Acetate CH ₃ COO • (CH ₂) ₇ CH ₃			X			X	A		A		A				
Oleic Acid (Red Oil) C ₁₈ H ₃₄ O ₂	X	X	C	C	A	B	A		A	C	B	A	B	B	A
Octachlorotoluene C ₇ Cl ₈		X	X			A	A		X				X		
Oleum (Fuming Sulfuric Acid) H ₂ SO ₄ /SO ₃		X	C		20-25% X	A	A	X	X	X	A		X		X
Olein (Triolene) C ₅₇ H ₁₀₄ O ₆		C	B				A								
o-Dichlorobenzene C ₆ H ₄ Cl ₂		X	X			A	A	X	X	A	A		X		
Olive Oil Mixed glycerides of acids	A	C	A	C		A	A	B	A	A	A	A	A	A	A

Rating specific to % of concentration. Temperature shown is °F. Where not shown, temperature is 70°F (21°C) Ambient.

CHEMICAL Formula	ELASTOMERS								METAL PARTS				PLASTICS		
	POLYURETHANE	NEOPRENE	BUNA-N	E.P.D.M.	HYTREL®	(VT)FKM FLUOROCARBON	PTFE, PFA	(TPE XL) SANTOPRENE®	ALUMINUM	CAST IRON/STEEL	STAINLESS STEEL	HASTELLOY	POLYPROPYLENE	ACETAL	PVDF
Oxalic Acid (COOH) ₂		B	C	A	X	C	A	A	B	X	90%B	B	A	X	A ^{120°}
Ozone O ₃	A	B	X	A	C	A	A	A	10%A	0%A	A	A	X	C	A
Paints & Solvents		X	X				A		X		A	A			
Paint Thinner, DUCO Hydrocarbons	X	C	A	X		B	A	C	X		A	A	X		
Palm Oil Mixture of terpenes		C	A			A	A	B		A	A	A			
Palmitic Acid CH ₃ (CH ₂) ₁₄ COOH	A	C	B	B	A	B	A	B	B	B	A		A		A
Paraffins (Paraffin Oil) Hydrocarbons			A				A	A	A		A	A	A	A	
Paraformaldehyde (CH ₂ O) _n		B	B			C	A		10%A	A	A	A			
Paraldehyde C ₆ H ₁₂ O ₃		B	C	A		X	A		A	A	A	A			
Peanut Oil Glycerides of fatty acids	C	B	A	X		A	A	B		A	A	A	A ^{70°}		A
Pentachloroethane (Pentalin) Cl ₂ • CHCCl ₃		X	X			A	A		X	A	A	A			
Pentachlorophenol (PCP) C ₆ Cl ₅ OH		X	X	X		A	A		A	A	A	A			
Pentane (Amyl Hydride) C ₅ H ₁₂		B	A	X	B	A	A	A	A	B	B				
Peppermint Oil		X	X			A	A	C			A				
Perchloric Acid HClO ₄		B	X	B	X	A	70%A	C	X	X	B			C	A
Perchloroethylene (Tetrachloroethylene) C ₂ Cl ₄	X	X	X	X	X	A	A	X	X	B	90%A	B	X	A	A
Petroleum (Crude Oil) (Sour) Hydrocarbons	C	C	B	X	C	A	A		B	B	A	A	X	A	A
Phenethyl Alcohol (Benzyl Carbinol) C ₆ H ₅ (CH ₂) ₂ OH	X	X	X	B		X	A		A	A	A	A			
Phenol (Carbolic Acid) C ₆ H ₅ OH	X	C	X	C	X	A	A	A	B	A	B	A	C	X	A ^{100°}
Phenyl Sulfonic Acid C ₆ H ₄ (OH)SO ₃ H			X			X	A		B	B	B				
Phenyl Acetate CH ₃ COOC ₆ H ₅	X	X	X	B		X	A								
Phenylbenzene C ₆ H ₅		X	X			A	A	C							
Phenyl Ethyl Ether (Phenetole) C ₆ H ₅ OC ₂ H ₅		X	X	X		C	A	C							
Phenyl Hydrazine C ₆ H ₅ NHNH ₂		X	X	X		A	A	B	A	X			X		A ^{120°}

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

CHEMICAL Formula	ELASTOMERS								METAL PARTS				PLASTICS		
	POLYURETHANE	NEOPRENE	BUNA-N	E.P.D.M.	HYTREL®	(VT)FKM FLUOROCARBON	PTFE, PFA	(TPE XL) SANTOPRENE®	ALUMINUM	CAST IRON/STEEL	STAINLESS STEEL	HASTELLOY	POLYPROPYLENE	ACETAL	PVDF
Phorone (Diisopropylidene Acetone) C ₉ H ₁₄ O		X	X	C		A	A	B							
Phosphoric Acid — 10% H ₃ PO ₄	A	B	A	A		A	A	A	X	X	A		A ^{120°}		A
Phosphoric Acid — 20% H ₃ PO ₄	A	B	C	A		A	A	A	X	X	A ^{212°}	A	A ^{120°}		A
Phosphoric Acid — 50% H ₃ PO ₄	A	B	X	B		A	A	^{45%} B	X	X	A	C	A ^{120°}		A
Phosphoric Acid (Conc.) H ₃ PO ₄	C	B	X	B	X	A	A		X	X	A ^{212°}		A ^{120°}		A
Phosphorus Oxychloride POCl ₃		X							B	B	B	B			
Phosphorus Trichloride PCl ₃		X	X	A		A	A	B	C	B	A	A	X		A
Photographic Developer		A	A		X	A		A	C	X	A	A	A	C	A
Pickling Solution (NO ₂) ₃ • C ₆ H ₂ OH	C	X		X		B	A	A				A			
	B	B	B	B	X	A	A	B	A	C	A	B	B		A
Pine Oil (Yarmor) Cyclic terpene alcohols		X	B	X		A	A	C	A	B	A				
Pinene C ₁₀ H ₁₆	C	X	B	X		A	A	C							
Piperidine C ₅ H ₁₁ N		X	X	X		X	A	B							
Plating Solution — Cadmium			B	B					A			A		X	
Plating Solution — Chrome	X	X	X	C		A	A	A					A ^{131°}	X	
Plating Solution — Lead		B	B				A	A						A	
Plating Solution — Others		C	A	A		B	A	A			A				
Polyvinyl Acetate Emulsion PVAc + H ₂ O		C		A			A	A		B					A
Potassium Acetate CH ₃ CO ₂ K		B	B	A		X	A	A	^{10%} B	A	B	B	A		A
Potassium Bicarbonate KHCO ₃		A	A			A	A	A	B	^{50%} B	^{30%} A	^{50%} B	A		A
Potassium Bisulfate KHSO ₄		A	A			A	A		^{10%} A	X	^{10%} A		A		A
Potassium Bisulfite KHSO ₃		A	A			A	A		^{10%} B		^{10%} B	^{90%} B			
Potassium Bromide KBr		A	A	A		A	A	A	A	^{80%} B ^{212°}	^{90%} B ^{212°}	^{70%} A ^{167°}	A		A
Potassium Carbonate (Potash) K ₂ CO ₃	C	A	A	A		A	A	A	X	B	B	^{90%} A	A	B	A
Potassium Chlorate KClO ₃		A	A	A		A	A	A	X	B	^{60%} A	^{20%} A	A	B	A
Potassium Chloride KCl	A	A	A	A		A	A	A	X	B	A	^{30%} A ^{167°}	A	B	A
Potassium Chromate K ₂ CrO ₄		A	A			^{50%} A	A	A	A	A	A		A		A

Rating specific to % of concentration. Temperature shown is °F. Where not shown, temperature is 70°F (21°C) Ambient.

CHEMICAL Formula	ELASTOMERS								METAL PARTS				PLASTICS		
	POLYURETHANE	NEOPRENE	BUNA-N	E.P.D.M.	HYTREL®	(VT) FKM FLUOROCARBON	PTFE, PFA	(TPE XL) SANTOPRENE®	ALUMINUM	CAST IRON/STEEL	STAINLESS STEEL	HASTELLOY	POLYPROPYLENE	ACETAL	PVDF
Potassium Copper Cyanide $K_3[Cu(CN)_4]$	A	A	A	A		A	A						A		A
Potassium Cyanide KCN	A	A	A	A		A	A	A	C	B	90%B ^{212°}	30%B	A	C	A
Potassium Dichromate $K_2Cr_2O_7$	A	A	A	A		A	A	A	A	A	A	25%B	A	C	A
Potassium Hydroxide (Caustic Potash) (Lye) KOH	B	B	B	A	C	B	A	A	X	B	A	50%B	A	C	A ^{150°}
Potassium Iodide KI		A	A	A		A	A		10%B		B	B	A		A
Potassium Nitrate (Saltpeter) KNO_3	A	A	A	A		A	A	A	80%A	B	80%B ^{212°}	80%B ^{212°}	A	B	A
Potassium Nitrite KNO_2	A	A	A	A	B	A	A		B	B	B	B			
Potassium Permanganate (Purple Salt) $KMnO_4$		C	C	A	X	B	A	A	10%A	B	30%B ^{212°}	A	B	A	A
Potassium Phosphate KH_2PO_4		A	A	A		A	A		X	X	30%B	10%B			
Potassium Silicate $K_2Si_2O_5$		A	A	A		A	A		B	B	B	B			
Potassium Sulfate K_2SO_4	A	A	A	A	B	A	A	A	B	B	A	A	A	B	A
Potassium Sulfide K_2S	A	A	A	A		A	A		X	B	B	10%B	A		A
Potassium Sulfite $K_2SO_3 \cdot 2H_2O$		A	A	A		A	A		A	X	50%B		A		A
Propane (LPG) C_3H_8	B	B	A	X	B	A	A	C	A	A	A	A	X	A	A
Propionaldehyde (Propanal) C_2H_5CHO			X			X	A		A	A	A	A			
Propionic Acid (Methylacetic Acid) $CH_3CH_2CO_2H$		X	X	A		A	A		A	X	B	90%A			
n-Propyl Acetate $CH_3COO \cdot (CH_2)_2CH_3$		X	X	A		X	A	B	A		A	A	C		A
Propyl Alcohol (1-Propanol) $CH_3CH_2CH_2OH$	X	B	B	A		A	A		A	A	A	A	A	A	A
n-Propyl Nitrate (NPN) $CH_3(CH_2)_2NO_3$			A	B		C	A	B	A	X					
Propylene C_3H_6		X	X	X		A	A	B	A	A	A	A			
Propylene Dichloride $CH_3CH(Cl)CH_2Cl$		X	X	X		B	A		X	A	A	B			
Propylene Glycol (Methyl Glycol) $C_3H_6(OH)_2$		C	A	A		A	A	A	A	A	A	A	A	A	A
Propylene Oxide C_3H_6O		X		C		X	A	A	B	B	A		X		X
Pydraul (Phosphate Eser Base Fluid)	X	X	X	B	A	A	A	A		A	A	A			

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

CHEMICAL Formula	ELASTOMERS								METAL PARTS				PLASTICS		
	POLYURETHANE	NEOPRENE	BUNA-N	E.P.D.M.	HYTREL®	(VT)FKM FLUOROCARBON	PTFE, PFA	(TPE XL) SANTOPRENE®	ALUMINUM	CAST IRON/STEEL	STAINLESS STEEL	HASTELLOY	POLYPROPYLENE	ACETAL	PVDF
Pyranol		X	A			A	A								
Pyridine N(CH) ₄ CH	X	X	X	C	X	X	A	A	A	B	A	50%A 100°	C	A	X
Pyroligneous Acid (Wood Vinegar)		C	C	C		A	A		B	X	10%A		A	X	A
Pyrrrole (Azole) C ₄ H ₅ N		X	X	X		C	A	C							
Quaternary Ammonium Salts NH ₄ (X)		A	A			A	A			X	A				
Quench Oil		B	B			A	A		A		A	A			
Rape-Seed Oil (Colza Oil)	C	C	B	A		A	A	B		A	A	A			
Rose Oil Geraniol, citronellol		C				A	A	A			A				
Rosin C ₂₀ H ₃₀ O ₂		C	A				A	A	A		A	A	A	B	
Rosin Oil (Rosinol)		A	A			A	A								
Rotenone C ₂₃ H ₂₂ O ₆		A	A	A		A	A								
Rubber Latex Emulsions (C ₅ H ₈) _n /H ₂ O						A	A		A		A	A			
Rubber Solvents (Petroleum Distillate) Hydrocarbons		C	X			X	A		A		A	A			
Rum Alcoholic liquor from molasses	X	A	A	A		B	A	A			A	A			
Rust Inhibitors		C	A			A		B			A		A		
Salad Dressing Fats, oils, water			A			A		A	B	X	A		A		
Sal Ammoniac (Ammonium Chloride) NH ₄ Cl	A	A	A	A	A	A	A	A	X	X	B	A	A	X	A
Sal Soda (Sodium Carbonate) NaCO ₃		A	A	A		A	A		X	A	A	A			
Salicylic Acid HOC ₆ • H ₄ COOH		B	B	A		B	A		A	X	B	A	A		A
Salt Water (Brine) NaCl/H ₂ O	A	B	A	A	A	A	A	A	B	X	A	A	A		A
Sea Water (Brine)	A	B	A	A	X	A	A	A	A	C	A	A	A	A	A
Sesame Seed Oil Olein, stearin, palmitin		C	A			A	A	B		A	A				
Sewage	X	B	A	C	B	A	A	A	B	B	A	A	A		A
Silicate Esters Si(OR) ₄	A	A	B	X	C	A	A	B							
Silicone Oils (Versilube Etc.) (CH ₃) ₂ SiO _{2n}	A	C	A	A	A	A	A	C	B	B	A	A	A		A
Silver Cyanide AgCN		A					A		X	A	A	A	A		A

Rating specific to % of concentration. Temperature shown is °F. Where not shown, temperature is 70°F (21°C) Ambient.

CHEMICAL Formula	ELASTOMERS								METAL PARTS				PLASTICS		
	POLYURETHANE	NEOPRENE	BUNA-N	E.P.D.M.	HYTREL®	(V)FKM FLUOROCARBON	PTFE, PFA	(TPE XL) SANTOPRENE®	ALUMINUM	CAST IRON/STEEL	STAINLESS STEEL	HASTELLOY	POLYPROPYLENE	ACETAL	PVDF
Silver Nitrate AgNO ₃	A	A	B	A		A	A	A	X	X	60%A	60%A	A	A	A
Skydrol Hydraulic Fluid® (Phosphate Ester Base)		X	X	A	A	C	A	B			A	A			
Soap Solutions Salt of fatty acid in H ₂ O	A	B	A	A	A	A	A	A	C	X	A	A	A	A	A
Soda Ash (Sodium Carbonate) Na ₂ CO ₃		A	A	A	B	A	A	A	X	A	A	A			
Sodium Acetate CH ₃ COONa	X	C	C	A		X	A	A	A	A	A	A	A	A	
Sodium Aluminate Na ₂ Al ₂ O ₄		A	A			A	A	A		50%A	50%A	10%B	A		A
Sodium Bicarbonate (Baking Soda) NaHCO ₃		A	A	A	B	A	A	A	B	C	20%A	20%A	A	X	A
Sodium Bisulfite (Niter Cake) NaHSO ₄		A	A	A	B	A	A	A	50%B	C	50%B	B	A	C	A
Sodium Bisulfite (Cream of Tartar) NaHSO ₃		A	C	A	B	A	A	A	B	20%B	50%A	B	A	X	A
Sodium Borate Na ₂ B ₄ O ₇		A	A	A	B	A	A	A	B		A	A	A ^{140°}	C	A
Sodium Bromide NaBr							A		C	C	30%B	50%B	A		A
Sodium Chlorate NaClO ₃		B	A	A		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	A	B	30%B	A	A	A	A	A
Sodium Chromate Na ₂ CrO ₄		A	A		A	A	A	80%A ^{212°}	60%A	60%A	60%A	A		A	A
Sodium Cyanide NaCN		A	A	A	A	A	A	A	X	A	A		A	C	A
Sodium Dichromate (Sodium Bichromate) Na ₂ Cr ₂ O ₇ • 2H ₂ O	A	B		A	20%X	A	A						A		A
Sodium Fluoride NaF		A	A	A		A	A		30%B		10%B	10%B	A		A
Sodium Hexametaphosphate (Calgon) (NaPO ₃) ₆	B	B	B	B		A	A		C	B	B	A			
Sodium Hydroxide (Caustic Soda) (Lye) NaOH	C	B	B	A	X	X	A	50%A	X	50%B	50%A	70%B ^{212°}	A	X	A
Sodium Hypochlorite NaClO	X	B	X	C	5%A	B	A	20%A	X	X	X	10%B	X	X	A
Sodium Metaphosphate (Kurrol's Salt) Na(PO ₃) _n	B	C	B	A		A	A	A	X		B	A	X	B	
Sodium Metasilicate Na ₂ SiO ₃		A	A			A		A	B		A	A	A	B	A
Sodium Nitrate (Chile Saltpeter) NaNO ₃		B	C	A	B	A	A	A	90%A	90%A	90%A	30%A	A	A	A

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

CHEMICAL Formula	ELASTOMERS								METAL PARTS				PLASTICS		
	POLYURETHANE	NEOPRENE	BUNA-N	E.P.D.M.	HYTREL®	(VT) FKM FLUOROCARBON	PTFE, PFA	(TPE XL) SANTOPRENE®	ALUMINUM	CAST IRON/STEEL	STAINLESS STEEL	HASTELLOY	POLYPROPYLENE	ACETAL	PVDF
Sodium Nitrite NaNO ₂		X	A			A	A		A	A	A	A			A
Sodium Perborate NaBO ₃		B	C	A	B	A	A	A	X	10%B	A	10%B	A	B	A
Sodium Peroxide (Sodium Dioxide) Na ₂ O ₂	X	B	B	B	B	A	A	B	10%B	90%A	0%B	10%B	B	X	A
Sodium Phosphate (Tribasic) (TSP) Na ₃ PO ₄	A	B	B	A	B	A	A	A	X	B ^{167°}	B	A	A		A
Sodium Silicates (Water Glass) Na ₂ O • SiO ₂		A	A	A	A	A	A	A	A	A	A	B	A		A
Sodium Sulfate (Salt Cake) (Thenardite) Na ₂ SO ₄	A	B	A	A	A	A	A	A	30%B	B	A	A	A		A
Sodium Sulfide (Pentahydrate) Na ₂ S • 5H ₂ O	A	A	A	A	A	A	A	A	30%A ^{212°}	B	30%A ^{167°}	50%B ^{212°}	A	A	A
Sodium Sulfite Na ₂ SO ₃	A	A	A	A	A	A	A	A	30%A	X	30%A	30%B ^{212°}	A	A	A
Sodium Tetraborate Na ₂ B ₄ O ₇ • 10H ₂ O				A		B			A			A		C	
Sodium Thiosulfate (Antichlor) Na ₂ S ₂ O ₃	A	A	A	A		A	A		A	C	A ^{122°}	B ^{122°}	A	B	A
Sorghum			A	A					A		A	A	A		
Soybean Oil Triglycerides of acids		C	A	A	C	A	A	A	B	A	A	A	A	B	B
Soy Sauce Fermented soya bean/wheat			A	A					A		X	A			
Sperm Oil (Whale Oil) Fatty acid esters		X	A			A	A	B		A	A	A			
Stannic Chloride (Tin Chloride) SnCl ₄	B	B	A	B	B	A	A	A	X	C	10%A	B	A		A
Stannous Chloride (Tin Chloride) SnCl ₂	B	A	A	B	15%B	A	A		X	B	10%A	A	A		A
Starch C ₆ H ₁₀ O ₅		A	A	B	B	C	A	A	A	C	A	A	A	B	
Stearic Acid CH ₃ (CH ₂) ₁₆ CO ₂ H	A	158°B	B	B	B	A	A	B	C	C	A	B	A	C	A
Stoddard Solvent Petroleum distillate	A	C	A	X	A		A	C	A	A	A	X	A	A	X
Styrene (Vinylbenzene) C ₆ H ₅ CHCH ₂	C	X	X	X	X	A	A	C	A	A	A	A			A
Sucrose Solution (Sugar) C ₁₂ H ₂₂ O ₁₁ /H ₂ O	X	A	A	A	A	A	A	A	A	A	A	A			
Sulfamic Acid H ₂ NSO ₃ H		A	B		A		A		10%A	X	X		X		X
Sulfite Liquors			B	A	C	B			A				A		
Sulfur	S	B	B	X	A	A	A		A	A	A	A	B	A	A
Sulfur Chloride S ₂ Cl ₂		X	C	X	C	A	A	X	B	X	B	A	X		A

Rating specific to % of concentration. Temperature shown is °F. Where not shown, temperature is 70°F (21°C) Ambient.

CHEMICAL Formula	ELASTOMERS								METAL PARTS				PLASTICS		
	POLYURETHANE	NEOPRENE	BUNA-N	E.P.D.M.	HYTREL®	(VT) FKM FLUOROCARBON	PTFE, PFA	(TPE XL) SANTOPRENE®	ALUMINUM	CAST IRON/STEEL	STAINLESS STEEL	HASTELLOY	POLYPROPYLENE	ACETAL	PVDF
Sulfur Dioxide SO ₂	B	A	X	B	X	A	A	A	A	B	10%A	80%A	A	B	A
Sulfur Hexafluoride SF ₆		A	B	A	A	A	A	B							
Sulfur Trioxide SO ₃	B	C	C	C	X	A	A	C	B	B	B	B	X		X
Sulfuric Acid 10% H ₂ SO ₄	B	A	B	A	A	A	A	A	X	X	A	A	A		A
Sulfuric Acid 25% H ₂ SO ₄	X	B	C	B	A	A	A	A	X	X	B	A	A		A ^{150°}
Sulfuric Acid 50% H ₂ SO ₄	X	B	C	B	A	A	A	A	X	X	X	A	A		A ^{150°}
Sulfuric Acid 60% H ₂ SO ₄	X	C	X	B	X	A	A	A	X	X	X	A	A		A ^{150°}
Sulfuric Acid 75% H ₂ SO ₄	X	X	X	C	X	A	A	A	X	C	C	A	A		A ^{150°}
Sulfuric Acid 95% H ₂ SO ₄	X	X	X	C	X	A	A	A	X	B	A	A	X		A ^{120°}
Sulfuric Acid (Conc.) H ₂ SO ₄	X	X	X	C		A	A	98%B	X	B	B	A	X		A ^{120°}
Sulfuric Acid (Fuming) H ₂ SO ₄	X	X	X	X	20%X	B	A		C	X	B	B			
Sulfurous Acid H ₂ SO ₃	X	X	B	C	C	A	A	A	B	X	B	B	A	X	A
Tall Oil (Liquid Rosin) Rosin acids		B	A	X		A	A	A	X	B ^{212°}	B	A	A		A
Tallow Fat from cattle, sheep			A			A	A	B	A		A		B	C	
Tannic Acid C ₇₆ H ₅₂ O ₄₆	A	B	C	C	10%A	A	A	A	A	A	A	10%B	A	X	A
Tanning Liquors Tannic acid		B	A				A	A	A		A	A	A	X	
Tar, Bituminous(Coal Tar) (Pitch) Mixture of aromatic & phenolic hydrocarbons		C	B	X	X	A	A	B	A		A	A	A	A	
Tartaric Acid C ₄ H ₆ O ₆	A	A	B	B	B	A	A	A	20%A	X	A	90%A	A	X	A
Terpenes C ₁₀ hydrocarbons	C	X	C	X		A	A		A	X					
Terpineol (Terpilenol) C ₁₀ H ₁₈ O	X	X	C	C		A	A	B	A	A	A	A	X		B ^{120°}
Tertiary Butyl Alcohol (CH ₃) ₃ COH		A	A			B	A	B					B		
Tertiary Butyl Catechol C ₉ H ₁₄ O ₂		B	X			A	A	B	C	B	B				
Tertiary Butyl Mercaptan C ₄ H ₁₀ S		X	X			A	A	B							
Tetra Bromomethane CBr ₄		X	X			A	A	X	X				X		
Tetrabutyl Titanate Ti(C ₄ H ₉) ₄		A	B	B		A	A	B							

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

CHEMICAL Formula	ELASTOMERS								METAL PARTS				PLASTICS		
	POLYURETHANE	NEOPRENE	BUNA-N	E.P.D.M.	HYTREL®	(VT)FKM FLUOROCARBON	PTFE, PFA	(TPE XL) SANTOPRENE®	ALUMINUM	CAST IRON/STEEL	STAINLESS STEEL	HASTELLOY	POLYPROPYLENE	ACETAL	PVDF
Tetrachloroethylene $Cl_2C = CCl_2$							X							A	
Tetrachlorodifluoroethane $(Cl_2FC)_2$		X	X												
Tetrachloroethane (Acetylene Tetrachloride) $(Cl_2HC)_2$		X	X	X		A	A	X	X	A	C	90%A ^{212°}	X	A	A
Tetraethyl Lead $Pb(C_2H_5)_4$		X	B	X		B	A	C	B	A	A		A		A
Tetraethylene Glycol (TEG) $HOCH_2(CH_2OCH_2)_3CH_2OH$						A	A								
Tetrahydrofuran (THF) C_4H_8O	C	X	X	C	C	X	A	B					C ^{100°}	A	B ^{70°}
Tetrahydronaphthalene (Tetralin) $C_{10}H_{12}$		X	X	X		A	A		A	A	A	A	C		
Thionyl Chloride $SOCl_2$		X	X	X		B	A	B	C	A	A	10%A	B	B	X
Thiophene C_4H_4S		X	X	X		C	A								
Titanium Tetrachloride $TiCl_4$		X	C	X		A	A	X	X	A	B	B	B		B
Toluene (Toluol) C_7H_8	X	X	C	X	C	B	A	C	A	A	A	A	X	B	A
Toluene Diisocyanate $CH_3C_6H_3(NCO)_2$		X		A	B		A	B							
Toluidine $CH_3C_6H_4NH_2$			X			B	A		A	A	A	A			
Tomato Pulp & Juice			A				A	A	B		A	A	A		A
Toothpaste		C	A			A	A			X	A	A			
Transformer Oil (Petroleum) Hydrocarbons	X	C	B	X		A	A	X	A	A	A	A	B	C	
Transmission Fluid (Type A)	A	C	A	X	B	A	A	C	A	A	A	A			
Triacetin $C_9H_{18}O_6$	X	B	A	A		X	A	A	B						
Triallyl Phosphate $P(OC_3H_7)_3$	C	C	X	A		A	A						B		A
Triaryl Phosphate $(C_6H_5O)_3PO$		C	X			A	A								
Tributoxyethyl Phosphate $(C_4H_9O)_3P(C_2H_5)$	X	X	X	A		B	A	B							
Tributyl Phosphate (TBP) $(C_4H_9)_3PO_4$	X	X	X	C	C	X	A	B	A	A	A		B ^{100°}		A ^{100°}
Dibutyl Mercaptan $(C_4H_9)_2S$		X	X			A	A	B							
Trichloroacetic Acid (TCA) CCl_3COOH		B	C	C	X	B	A	B	X	X	X	B	B		B
Trichlorobenzenes $C_6H_3Cl_3$		X	X			B	A		X	A	A	B			
Trichloroethane $C_2H_3Cl_3$	X	X	X	X		B	A	X	X	A	A	A	X		A

Rating specific to % of concentration. Temperature shown is °F. Where not shown, temperature is 70°F (21°C) Ambient.

CHEMICAL Formula	ELASTOMERS								METAL PARTS				PLASTICS		
	POLYURETHANE	NEOPRENE	BUNA-N	E.P.D.M.	HYTREL®	(VT)FKM FLUOROCARBON	PTFE, PFA	SANTOPRENE® (TPE XL)	ALUMINUM	CAST IRON/STEEL	STAINLESS STEEL	HASTELLOY	POLYPROPYLENE	ACETAL	PVDF
Trichloroethylene (Ex-Tri) (Hi-Tri)® C ₂ HCl ₃	X	X	X	X	X	C	A	X	X	B	90%A ^{167°}	A	X	B	A
Trichloropropane CH ₂ ClCHClCH ₂ Cl		A	X			B	A	X	X	A	A	A	X		
Tricresyl Phosphate (Lindol) (TCP) [®] (CH ₃ C ₆ H ₄ O) ₃ • PO	X	C	X	A	C	C	A	B		A	B	A	B		X
Tricresyl Alcohol (Tridecanol) C ₁₂ H ₂₅ • CH ₂ OH			A			B	A								
Triethanol Amine (TEA) N(C ₂ H ₄ OH) ₃	X	A	X	B	X	C	A	A	A	A	A	A	A	B	X
Triethyl Aluminum (ATE) Al(C ₂ H ₅) ₃		X	X			B	A	B							
Triethyl Amine (CH ₃ CH ₂) ₃ N		B	A				A			A	A	A	C		A ^{120°}
Triethyl Borane (C ₂ H ₅) ₃ B		X	X			A	A	B							
Triethylene Glycol (TEG) (CH ₂ OCH ₂ CH ₂ OH) ₂			A			A	A						A		
Trimethylene Glycol HO(CH ₂) ₃ OH			A	A		A	A		A	A	A	A			
Trinitrotoluene (TNT) CH ₃ C ₆ H ₂ (NO ₂) ₃		B	X	X		C	A	A							
Trioctyl Phosphate (C ₈ H ₁₇ O) ₃ PO		X	X	A		B	A	B							
Tung Oil (Wood Oil) Fatty acids	C	C	A	X	B	A	A	B	A		A	A	A		
Turpentine C ₁₀ H ₁₆	X	X	A	X	B	A	A	C	A	A	A	A	X	A	A
Unsymmetrical Dimethyl Hydrazine (UDMN) H ₂ NN(CH ₃) ₂		C	C	A		X	A	B							A
Urea (Carbamide) CO(NH ₂) ₂		B	B		B	A	A		B		50%B		A	A	A
Urine		X	A			A	A	A	A	A	A	A	A	C	A
Valeric Acid CH ₃ (CH ₂) ₃ COOH		X	X	A			A		A						
Vanilla Extract (Vanillin) C ₆ H ₃ (CHO) • (OCH ₃) ₃ (OH)		X	A			X	A				A				
Varnish Oil, gum resins, oil of turpentine		C	B	X		A	A		A		A	A	A		A
Vegetable Juices		C	A				A	A	C		A				
Vegetable Oils	A	C	B	A		A	A	B	A	B	A	A	X		
Vinegar Dilute acetic acid	X	B	C	A	C	A	A	A	C	X	A	A	A	C	A
Vinyl Acetate CH ₃ COOC, HCH ₂		B	X			X	A		B	A	A	A	B		A
Vinyl Chloride (Chloroethylene) CH ₂ CHCl		X	X	C		A	A	X	X	A	A	A	X		B

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

CHEMICAL Formula	ELASTOMERS								METAL PARTS				PLASTICS		
	POLYURETHANE	NEOPRENE	BUNA-N	E.P.D.M.	HYTREL®	(VT)FKM FLUOROCARBON	PTFE, PFA	(TPE XL) SANTOPRENE®	ALUMINUM	CAST IRON/STEEL	STAINLESS STEEL	HASTELLOY	POLYPROPYLENE	ACETAL	PVDF
Walnut Oil		B	A			A	A								
Water, Distilled (Also Deionized) H ₂ O	A	C	A	A		A	A	A	A	C	A	A	A	A	A
Water, Fresh H ₂ O	A	B	A	A	A ^{72°}	A	A	A	A	A	A	A	A	A	A
Waxes Hydrocarbons		A	A	X			A		A		A	A		A	
Weed Killers		C	B			A		B	X		A				
Whiskey Ethanol, esters, acids	A	A	B	A	B	A	A	A	A	X	A	A	A	B	A
White Oil (Mineral) (Petroleum) Mixture of liquid hydrocarbons		C	A	X		A	A	C			A	A			
White Sulfate Liquor		A	B	A		B	A		B	C	A	B	A		A
Wines	X	A	A	A	A	B	A	A	C	X	A	A	A	B	A
Wort, Distillery Sugar solution from malt		A				A	A		A	B	A	A			
Xylene (Xylol) C ₆ H ₄ (CH ₃) ₂	X	X	X	X	C	A	A	C	A	B	B	A	X	A	A
Xylidines (Xylidin) (CH ₃) ₂ C ₆ H ₃ NH ₂		X		X		X	A	C	B	B					
Zeolite Hydrated alkali aluminum silicates		C	C	A		A	A	A			A	A			
Zinc Acetate Zn(C ₂ H ₃ O ₂) ₂		B	C	A		X	A	A	C				A		A
Zinc Carbonate ZnCO ₃			A			A	A		B	B	B	B			
Zinc Chloride ZnCl ₂	A	B	B	A	A	A	A	A	10%A	B	10%A	A	A	B	A
Zinc Hydrosulfite ZnHSO ₃		A	A			A	A	A	X		A				
Zinc Sulfate ZnSO ₄		A	A	A	X	B	A	A	20%B	X	B	90%B	A	B	A

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

Rating specific to % of concentration. Temperature shown is °F. Where not shown, temperature is 70°F (21°C) Ambient.

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