



**WHISPER
PUMPS**

***CHEMICAL
RESISTANCE
CHART***

CHEMICAL Formula	ELASTOMERS										METAL PARTS				PLASTICS					
	RUPPLON™(polyurethane)	NEOPRENE	BUNA-N	E.P.D.M.	HYTREL®	FLUOROCARBON (Viton®)	BLUE GYLON®	PTFE, PFA	ENVELO®	SANTOPRENE®	ALUMINUM	CAST IRON/STEEL	STAINLESS STEEL	WR-C (Hastelloy Equiv.)	UNFILLED POLYPROPYLENE	ACETAL (Delrin®)	KYNAR® (PVDF)	NYLON	RYTON®	UHMW POLYETHYLENE
Acetaldehyde (Ethanal) CH ₃ CHO	X	X	X	A	B	X		A		B	A	B	A	A	C	A	A ^{150°}	B	A	B
Acetamide (Acetic Acid Amide) CH ₃ CONH ₂	X	B	B	A		B		A		A	A	X	X	A	A		A ^{140°}	A	A	
Acetate Solvents CH ₃ COOR		X	X			X		A		B	A		A		X	A	A	A	A	B ^{122°}
Acetic Acid — 20%	B	B	C	A	A	C		A	A	B		A	A	C	B	A	B	A		A ^{122°}
Acetic Acid — 30%	X	B	C	A	A	X		A	A	B	X	A	A	C	B	B	B			A ^{122°}
Acetic Acid — 50% CH ₃ COOH	C	C	C	A		C		A	A	B	X	A	A	C	B	B	B			A ^{122°}
Acetic Acid — Glacial CH ₃ COOH	X	X	C	B	A	X		A	A	B	B	X	A	A	C	B	A ^{120°}	X	A	B
Acetic Anhydride (Acetic Oxide) (CH ₃ CO) ₂ O	X	B	C	B	C	X	A	A	A	A	B	90% B ^{212°}	A	A	X	X	B ^{70°}	A	A	A
Acetone (Dimethylketone) CH ₃ COCH ₃	X	X	X	A	C	X	A	A	A	B	B	A	A	A	X	B ^{120°}	X	B		A ^{122°}
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	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	A	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	X	A	
Acetylene (Ethyne) HC ° CH		C	A	A	A	A	A	A	A	C	A	A	A	A	X	A	A	B	A	
Acetyl Salicylic Acid (Aspirin) (CH ₃ OCO) • C ₆ H ₄ COOH		X		B				A		A	X	B	B							A ^{140°}
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	A	B	A	A	A	A	B		A	A		
Adipic Acid (1,4-Butanedicarboxylic Acid)		X	B			A		A		B	B	B	B	A	A		A	A		A ^{140°}
Allyl Alcohol (2-Propen-1-ol) CH ₂ CHCH ₂ OH		A	A	A		B		A		B	A	A	A				A			A
Alcohols R-OH					B									A	A	A	A	A	A	A

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

CHEMICAL Formula	ELASTOMERS										METAL PARTS				PLASTICS					
	RUPPLON™(Polyurethane)	NEOPRENE	BUNA-N	E.P.D.M.	HYTREL®	FLUOROCARBON (Viton®)	BLUE GYLON®	PTFE, PFA	ENVELON®	SANTOPRENE®	ALUMINUM	CAST IRON/STEEL	STAINLESS STEEL	WR-C (Hastelloy Equiv.)	UNFILLED POLYPROPYLENE	ACETAL (Delrin®)	KYNAR® (PVDF)	NYLON	RYTON®	UHMW POLYETHYLENE
Amyl (1-Pentanol) C ₄ H ₉ CH ₂ OH		B	B			B		A		A	B		A	A	B	A	A	A	A	A
Benzyl (Phenylcarbinol) C ₆ H ₅ CH ₂ OH		B	X			A		A		A	B		A	A	A		A			A ^{140°}
Butyl (Butanol) C ₃ H ₇ CH ₂ OH		A	A			A		A		A	B		A	A	B	A	A	B	A	A ^{140°}
Diacetone (Tyranton) (CH ₃) ₂ C(OH) CH ₂ COCH ₃	C	X	X	B		X		A		C	A	A	A	A	X	A	A	A		
Ethyl (Ethanol) CH ₃ CH ₂ OH	X	A	A		X	B		A		B	B	B	A	A	A ^{100°}		A	X	A	A ^{140°}
Hexyl (1-Hexanol) C ₅ H ₁₁ CH ₂ OH		B	A			A		A		B	A		A	A	A ^{70°}		A			A ^{140°}
Isobutyl (2-Methyl-1-Propanol) C ₃ H ₇ CH ₂ OH	X	A	C			A		A		A	B		A	A			A			A ^{140°}
Isopropyl (2-Propanol) H ₃ CCH(OH)CH ₃		B	C			A		A		B	B	C	A	A	A		A ^{150°}			A ^{140°}
Methyl (Methanol) CH ₃ OH		A	A	X		X		A		A	B	A	A	A	A ^{120°}		A			A ^{140°}
Octyl (Caprylic Alcohol) C ₇ H ₁₅ • CH ₂ OH		B	B			A		A		B	A		A	A						
Propyl (Propanol) C ₂ H ₅ CH ₂ OH		A	A			A		A		A	A		A	A	A		A ^{120°}			A ^{140°}
Allyl Bromide (3-Bromopropene) H ₂ C=CHCH ₂ Br		X	X	X		B		A			X	A								
Allyl Chloride (3-Chloropropene) CH ₂ =CHCH ₂ Cl		X	X	X		B		A			X	C	B		A ^{70°}		A			B
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 •12H ₂ O		A	A	A		X		A	A	A			B	B	A		A	C		A ^{140°}
Aluminum Acetate (Burow's Solution)		C	C	A		X		A		A		B	C	A	A	A ^{100°}		A		A ^{140°}
Aluminum Bromide AlBr ₃		A	A					A									A			
Aluminum Chloride AlCl ₃	B	A	A	A	B	A	A	A	A	20%A	X	C	B	25%A	A	B	A	B	A	
Aluminum Fluoride AlF ₃		A	A	B		A	X	A	A	A	50%A	C	C	20%A	A	X	A	A	A	A ^{140°}
Aluminum Hydroxide (Alumina Trihydrate) Al(OH) ₃		A	B	A		C		A	A	A	10%B	30%B	B	10%B	A		A	A		A ^{140°}

Data limited to % concentration and/or temperature °F shown. Where not shown temperature is 70°F (21 °C) Ambient.

CHEMICAL Formula	ELASTOMERS										METAL PARTS				PLASTICS					
	RUPPLON™(polyurethane)	NEOPRENE	BUNA-N	E.P.D.M.	HYTREL®	FLUOROCARBON (Viton®)	BLUE GYLON®	PTFE, PFA	ENVELON®	SANTOPRENE®	ALUMINUM	CAST IRON/STEEL	STAINLESS STEEL	WR-C (Hastelloy Equiv.)	UNFILLED POLYPROPYLENE	ACETAL (Delrin®)	KYNAR® (PVDF)	NYLON	RYTON®	UHMW POLYETHYLENE
Aluminum Nitrate $\text{Al}(\text{NO}_3)_3 \cdot 9\text{H}_2\text{O}$		A	A	A		A		A	A	A	X		0%A	0%B	A		A	B		A ^{140°}
Aluminum Phosphate AlPO_4		A	A	A		A		A		A										
Aluminum Potassium Sulfate (Potash Alum) $\text{KAl}(\text{SO}_4)_2$		A	A	A		A		A		A	10%A	X	A	B	A	A	A	X		A ^{140°}
Aluminum Sodium Sulfate (Soda Alum) $\text{NaAl}(\text{SO}_4)_2$	A	A	A	A		A		A												
Aluminum Sulfate (Cake Alum) $\text{Al}_2(\text{SO}_4)_3$	A	A	A	A	B	A	A	A	A	A	30%B	X	50%A 167°	90%A 212°	A	B	A	A	A	A ^{120°}
Amines R-NH_2		B	X		A ^{70°}	X				A	A		A		B	C		A	A	
Ammonia Anhydrous, Liquid NH_3	X	B	B	A	X	X		A		A	A	A	A	A	A	X	A	A	A	A
Ammonia Gas — Cold		A	A			A		A		A										A
Ammonia Gas — Hot		B	C			X		A		A										A ^{140°}
Ammonia Liquors		A				X		A		A	A	A	A							
Ammonium Nitrate NH_4NO_3		B	A	A	B	A	A	A		A	B	B	A	A	A	B	A	C		A ^{140°}
Ammonium Cupric Sulfate $(\text{NH}_4)_2\text{Cu}(\text{SO}_4)_2$			A			A		A												
Ammonium Acetate $\text{CH}_3\text{CO}_2\text{NH}_4$		A				A		A		A	50%B	50%A								A
Ammonium Bicarbonate NH_4HCO_3		A	A	A		A		A		B	B	90%B								A ^{140°}
Ammonium Bifluoride — 10% NH_4HF_2		X	B					A		A	C	X	B	B	A		A			
Ammonium Carbonate $(\text{NH}_4)_2\text{CO}_3$		B	X	A		A		A		A	B	B	70%B 212°	70%B 212°	A		A	A	A	A
Ammonium Casenite		A								A			A							
Ammonium Chloride (Sal Ammoniac) NH_4Cl	A	A	A	A	A	A	A	A	A	A	X	X	B	A	A	X	A	B	A	A ^{140°}
Ammonium Dichromate $(\text{NH}_4)_2\text{Cr}_2\text{O}_7$		A	A	A				A		A	A	30%A								
Ammonium Fluoride NH_4F		B	B			20%A		A			10%B	20%B	B	40%A	B		A	A		A ^{140°}
Ammonium Hydroxide (Aqua Ammonia) NH_4OH	A	B	B	A		B	A	A	A	A	30%A	30%B	50%A	80%A	A	B	A	C	A	A ^{140°}
Ammonium Metaphosphate		A	A	A		A		A			90%B	B	B	A	A		A			A ^{140°}
Ammonium Nitrite NH_4NO_2		A	A					A	A	A					70%A		A			

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

CHEMICAL Formula	ELASTOMERS										METAL PARTS				PLASTICS					
	RUPPLON™(Polyurethane)	NEOPRENE	BUNA-N	E.P.D.M.	HYTREL®	FLUOROCARBON (Viton®)	BLUE GYLON®	PTFE, PFA	ENVELON®	SANTOPRENE®	ALUMINUM	CAST IRON/STEEL	STAINLESS STEEL	WR-C (Hastelloy Equiv.)	UNFILLED POLYPROPYLENE	ACETAL (Delrin®)	KYNAR® (PVDF)	NYLON	RYTON®	UHMW POLYETHYLENE
Ammonium Oxalate (NH ₄ OOC) ₂		A	A							A			A	A						A ^{140°}
Ammonium Persulfate (NH ₄) ₂ S ₂ O ₈	X	A	C	B		A		A		A	C	X	A		A		A	X		A ^{140°}
Ammonium Phosphate, Monobasic (NH ₄)H ₂ PO ₄		A	A	A	B	A	A	A	A	A	X	X	B	5%A	A		A			A ^{140°}
Ammonium Phosphate, Di-Basic (NH ₄) ₂ HPO ₄		A	A			A	A	A	A	A	B		A	A	A	B	A	C	A	
Ammonium Phosphate, Tri-Basic (NH ₄) ₃ PO ₄ •3H ₂ O		A	A			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	A	A	X	B	80%A ^{212°}	40%B	A	B	A	B	A	A ^{120°}
Ammonium Sulfide (NH ₄) ₂ S		A	A			A		A			B		B	10%A						A ^{140°}
Ammonium Sulfite (NH ₄) ₂ SO ₃ •H ₂ O			A			A		A			C	X	B	A ^{212°}	A	X		A		
Ammonium Thiocyanate NH ₄ SCN		A	A	A		A		A			C	C	50%A	50%A						A ^{140°}
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	A	A	B	A	B	A	B	X	X	A ^{120°}	C	A	B
Amyl Alcohol (Pentyl Alcohol) CH ₃ (CH ₂) ₄ OH	X	A	B	A	A	A	A	A	A	B	A	A	A	B	A		A			A ^{140°}
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	C		C
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	A	A	B	B	A	A	B	A	A	A	A	A	B ^{122°}
Aniline Dyes	X	C	C	C		B	A	A	A	B	B	C	B							
Aniline Hydrochloride C ₆ H ₅ NH ₂ •HCl		X	C			B		A		A	X	X	X		X		A	X		C ^{140°}
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							

Data limited to % concentration and/or temperature °F shown. Where not shown temperature is 70°F (21 °C) Ambient.

CHEMICAL Formula	ELASTOMERS										METAL PARTS				PLASTICS						
	RUPPLON™(Polyurethane)	NEOPRENE	BUNA-N	E.P.D.M.	HYTREL®	FLUROCARBON (Viton®)	BLUE GYLON®	PTFE, PFA	ENVELON®	SANTOPRENE®	ALUMINUM	CAST IRON/STEEL	STAINLESS STEEL	WR-C (Hastelloy Equiv.)	UNFILLED POLYPROPYLENE	ACETAL (Delrin®)	KYNAR® (PVDF)	NYLON	RYTON®	UHMW POLYETHYLENE	
Anisole (Methylphenyl Ether) C ₆ H ₅ OCH ₃		X				X		A			B	B	B	B							C ^{140°}
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							A ^{140°}
Antimony Trichloride SbCl ₃			B	A		A		A			B	A	A	B	A		A	X			A
Aqua Regia (Nitric & Hydrochloric Acid)	X	X	X	X		B	X	A	A	X	X	X	X	C	C	X	A	X	X		B
Aroclor® PCB mixtures		X	C	X		A		A			A	B	A	90%A	X			A			
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							
Arsenic Acid AsH ₃ O ₄	X	A	B	A		A		A		A	A	X	B	B	A		A	X	A		
Arsenic Trichloride (Arsenic Butter) AsCl ₃		A	C	X		X		A		B	B	B	X	B							A ^{140°}
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	A	A	B	A	B	A		A	B	A	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							

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

CHEMICAL Formula	ELASTOMERS										METAL PARTS				PLASTICS					
	RUPPLON™(Polyurethane)	NEOPRENE	BUNA-N	EP.D.M.	HYTREL®	FLUOROCARBON (Viton®)	BLUE GYLON®	PTFE, PFA	ENVELON®	SANTOPRENE®	ALUMINUM	CAST IRON/STEEL	STAINLESS STEEL	WR-C (Hastelloy Equiv.)	UNFILLED POLYPROPYLENE	ACETAL (Delrin®)	KYNAR® (PVDF)	NYLON	RYTON®	UHMW POLYETHYLENE
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	A	A	A ^{140°}
Barium Chloride Dihydrate BaCl ₂ • 2H ₂ O	A	A	A	A		A	A	A	A		50%B	B	B ^{212°}	B		A	A	A	B	A
Barium Cyanide Ba(CN) ₂		A	C		X	A				A			A		X			A		
Barium Hydroxide (Barium Hydrate) Ba(OH) ₂	A	A	A	A	B	A	A	A	A	A	X	B	50%A ^{122°}	B	A		A	A	A	A ^{140°}
Barium Nitrate Ba(NO ₃) ₂		A	A					A		A	B	A	A	A	A	B	A	A		
Barium Sulfate (Blanc Fixe) BaSO ₄	A	A	A	A	X	A		A		A	B	B	B		A	B	A	A	A	A
Barium Sulfide BaS	A	A	A	A		A	A	A	A	A	X		B	A	A		A	A	A	A ^{120°}
Beef Extract		A	A			A		A				X	A							
Beer Water, carbonate	X	A	C	A	B	A	A	A	A	A	A	X	A	A	75°A	A	A ^{175°}	A	A	A ^{140°}
Beet Sugar Liquors (Sucrose)	X	A	A	A		A	A	A		A	A	B	A		A	B	A	A		
Benzaldehyde C ₆ H ₅ CHO	X	X	X	B	B	X		A	A	B	A	A	A	A	X		A	X	A	C
Benzene (Benzol) C ₆ H ₆	X	X	X	X	70°C	B	A	A	A	C	B	B	A ^{167°}	B	X	A	B	A	A	C
Benzene Sulfonic Acid C ₆ H ₅ SO ₃ H		A	C	C		A		A			C	A	A	90%A	X		B ^{100°}	X	A	A
Benzoic Acid (Benzene Carboxylic Acid) C ₆ H ₅ COOH		B	X	B		A		A			B	X	B	70%A	X	B	A	X	A	A ^{140°}
Benzoyl Chloride C ₆ H ₅ COCl	X	X	X	X		B		A	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	A	B	A		A	X	A	A ^{140°}
Benzyl Benzoate C ₆ H ₅ CO ₂ CH ₂ C ₆ H ₅		X	X	B		A		A		C	A	B	B	B						

Data limited to % concentration and/or temperature °F shown. Where not shown temperature is 70°F (21 °C) Ambient.

CHEMICAL Formula	ELASTOMERS										METAL PARTS				PLASTICS					
	RUPPLON™(polyurethane)	NEOPRENE	BUNA-N	E.P.D.M.	HYTREL®	FLUOROCARBON (Viton®)	BLUE GYLON®	PTFE, PFA	ENVELON®	SANTOPRENE®	ALUMINUM	CAST IRON/STEEL	STAINLESS STEEL	WR-C (Hastelloy Equiv.)	UNFILLED POLYPROPYLENE	ACETAL (Delrin®)	KYNAR® (PVDF)	NYLON	RYTON®	UHMW POLYETHYLENE
Benzyl Chloride (Chlorotoluene) C ₆ H ₅ CH ₂ Cl	X	X	X	X		A		A		C	X	A	B	A	X	A	A	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							A ^{140°}
Black Sulfate Liquor	X	A	B	A	B	A	A	A	A		C	B	A	B						A ^{140°}
Blast Furnace Gas CO, H ₂ , CH ₄ , CO ₂ , N ₂		A	C		B	A		A	A	A										
Bleach Solutions Water, chlorine, oxygen		X	X	A	C	B		A	A	B	X		B	A ^{125°}	X					A ^{140°}
Borax (Sodium Borate) B ₄ Na ₂ O ₇	A	A	B	A	A	A	A	A	A	A	B	B	A	A	A	B	A	A	A	A ^{140°}
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	A	A	X	30%A	80%A ^{167°}	A	C	A	B	A	A ^{120°}
Brake Fluid (Non-Petroleum Base) Silicones or glycols		A	X	A				A		A	A	A	A	A	X			B		
Brewery Slop		A	A			A		A		A		A	A							
Brine (Sodium Chloride) Salt water	A	B	A	A	B	A		A	A			X	A	A	A		A			A ^{140°}
Bromine — Anhydrous Br ₂	X	X	X	C	X	A	X	A		C	B	C	X	A	X		A ^{150°}			X
Bromine Trifluoride BrF ₃	X	X	X	X		X	X	A	C	C	A		B		X					
Bromine Water		B	X	X		B		A		B	X	X	X	A	X		A			C
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	A	C	A	A	A		X		A	A	A	C
Butane (LPG) (Butyl Hydride) C ₄ H ₁₀	B	B	A	X	A	A	A	A	A	C	A	A	A	A	X	B	A	A	A	A ^{140°}

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

CHEMICAL Formula	ELASTOMERS										METAL PARTS				PLASTICS					
	RUPPLON™(Polyurethane)	NEOPRENE	BUNA-N	E.P.D.M.	HYTREL®	FLUOROCARBON (Viton®)	BLUE GYLON®	PTFE, PFA	ENVELON®	SANTOPRENE®	ALUMINUM	CAST IRON/STEEL	STAINLESS STEEL	WR-C (Hastelloy Equiv.)	UNFILLED POLYPROPYLENE	ACETAL (Delrin®)	KYNAR® (PVDF)	NYLON	RYTON®	UHMW POLYETHYLENE
Butter Fats	A	C	A	A	B	A		A		B	A	X	A							A ^{140°}
Buttermilk Fats, water		A	A			A				A	A		A		A		A	B		
Butyl Acetate $\text{CH}_3\text{CO}_2(\text{CH}_2)_3\text{CH}_3$	C	X	X	B	C	X	A	A	A	B	A	A	A	A	X	B	A ^{100°}	A	A	B
n-Butyl Acetate $\text{CH}_3\text{CO}_2(\text{CH}_2)_3\text{CH}_3$		X	X	X		X		A		A	A	A	A	A						
Butyl Acetyl Ricinoleate $\text{C}_{24}\text{H}_{44}\text{O}_5$		X	C	C		B		A		B				A						
Butyl Acrylate $\text{CH}_2\text{CHCO}_2\text{C}_4\text{H}_9$		X	X	X		X		A		C							C			
Butyl Alcohol (Butanol) $\text{CH}_3(\text{CH}_2)_3\text{OH}$	X	A	A	B	B	A	A	A	A	A	A	B	A	A	A		A			
Butyl Amine (Aminobutane) $\text{CH}_3(\text{CH}_2)_2\text{CH}_2\text{NH}_2$	X	X	B	X		X		A	A	A	A	A	A		X	C	B ^{70°}	A	A	
Butyl Benzoate $\text{C}_6\text{H}_5\text{COO} \cdot (\text{CH}_2)_3\text{CH}_3$		X		B		A		A		C	B	B	B	B						
Butyl Bromide $\text{CH}_3(\text{CH}_2)_2\text{CH}_2\text{Br}$			X			B		A									A			
Butyl Butyrate $\text{CH}_3(\text{CH}_2)_2 \cdot \text{CH}_2\text{CO}_2\text{C}_4\text{H}_9$			X			X		A			A	A	A	A						
Butyl Carbitol® $\text{CH}_3(\text{CH}_2)_3\text{OCH}_2$ $\text{CH}_2\text{OCH}_2\text{CH}_2\text{OH}$		B	A	A		A		A		B										
Butyl Cellosolve® $\text{HOCH}_2\text{CH}_2\text{OC}_4\text{H}_9$		C	B			C		A		A							B			
Butyl Chloride (Chlorobutane) $\text{CH}_3(\text{CH}_2)_3\text{Cl}$			X			A		A			X	B	B	B	X		A	A		
Butyl Ether (Dibutyl Ether) $(\text{CH}_3(\text{CH}_2)_3)_2\text{O}$		B	A			C		A			A	B	A	A	X		A ^{100°}	A	A	
Butyl Oleate $\text{C}_{22}\text{H}_{42}\text{O}_2$		X		C		A		A		C										
Butyl Stearate $\text{CH}_3(\text{CH}_2)_{16} \cdot \text{CO}_2(\text{CH}_2)_3\text{CH}_3$		X	A	C		B		A		C	B	B	B	B			A			
Butylene (Butene) C_4H_8	X	X	B	X		B		A		X	A		A		X		A	B	A	
Butyraldehyde $\text{CH}_3(\text{CH}_2)_2\text{CHO}$	C	X	X	C		X		A		C	A	A	A	A						C
Butyric Acid $\text{CH}_3(\text{CH}_2)_2\text{CO}_2\text{H}$		X	C	C	B	C		A		A	A	X	B	A	A	X	A	C	A	B
Butyronitrile $\text{CH}_3\text{CH}_2\text{CH}_2\text{CN}$		X	X	A				A												
Calcium Acetate Hydrate $\text{Ca}(\text{CH}_3\text{COO})_2 \cdot \text{H}_2\text{O}$		C	B	A		X		A			C	C	B	B						
Calcium Bisulfite $\text{Ca}(\text{HSO}_3)_2$	A	A	A	X	X	A	A	A	A		X	X	90%A	A		A	X	A	B	A

Data limited to % concentration and/or temperature °F shown. Where not shown temperature is 70°F (21 °C) Ambient.

CHEMICAL Formula	ELASTOMERS										METAL PARTS				PLASTICS					
	RUPPLON™(polyurethane)	NEOPRENE	BUNA-N	E.P.D.M.	HYTREL®	FLUOROCARBON (Viton®)	BLUE GYLON®	PTFE, PFA	ENVELO®	SANTOPRENE®	ALUMINUM	CAST IRON/STEEL	STAINLESS STEEL	WR-C (Hastelloy Equiv.)	UNFILLED POLYPROPYLENE	ACETAL (Delrin®)	KYNAR® (PVDF)	NYLON	RYTON®	UHMW POLYETHYLENE
Calcium Carbonate (Chalk) CaCO ₃		A	A	A		A		A		A	C	B	B	B	A	A	A	A		A
Calcium Chlorate Ca(ClO ₃) ₂		A	A	A		A		A			30%B	B	30%B	70%B	A		A			A ^{140°}
Calcium Chloride (Brine) CaCl ₂ • 6H ₂ O	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	X	A	B	A	A ^{140°}
Calcium Hydrosulfide (Calcium Sulfhydrate) Ca(HS) ₂ • 6H ₂ O			A			A		A												A ^{140°}
Calcium Hydroxide (Slaked Lime) Ca(OH) ₂	A	A	A	A	B	A	A	A	A	A	X	B	50%B	50%A	A	X	A	B		
Calcium Hypochlorite 20% (Calcium Oxichloride) Ca(ClO) ₂	X	X	C	B	5%A	B	A	A	A	A	X	X	B	B ^{125°}	A	A	A	A	A	A ^{120°}
Calcium Nitrate Ca(NO ₃) ₂	A	A	A	A		A		A	A	A	40%B ^{212°}	30%B ^{212°}	50%B ^{212°}	10%B	A	X	A	A	A	A ^{140°}
Calcium Oxide (Unslaked Lime) CaO		A	A	A	B			A			A	A	A	A						A ^{140°}
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	A	X	A ^{140°}
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		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						
Carbolic Acid (see Phenol) C ₆ H ₅ OH	X	C	X	C		A		A	A	A	B	A	B	A	C	X	A ^{150°}	X	A	A
Carbon Dioxide (Carbonic Acid Gas) CO ₂	A	A	A	B	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	C

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

CHEMICAL Formula	ELASTOMERS										METAL PARTS				PLASTICS					
	RUPPLON™(Polyurethane)	NEOPRENE	BUNA-N	E.P.D.M.	HYTREL®	FLUOROCARBON (Viton®)	BLUE GYLON®	PTFE, PFA	ENVELON®	SANTOPRENE®	ALUMINUM	CAST IRON/STEEL	STAINLESS STEEL	WR-C (Hastelloy Equiv.)	UNFILLED POLYPROPYLENE	ACETAL (Delrin®)	KYNAR® (PVDF)	NYLON	RYTON®	UHMW POLYETHYLENE
Carbon Disulfide (Carbon Bisulfide) CS ₂	C	X	X	X	C	A	A	A	A	X	A	B	90%A		X	B	A	B	A	X
Carbon Monoxide CO	A	A	C	C	A	C	X	A	A	A	A	A	A	A	A	B	A	A		A ^{140°}
Carbon Tetrachloride (Tetrachloromethane) CCl ₄	X	X	C	X	X	A	X	A	A	X	X	C	B	A	X	B	A	B	A	X
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	A	X	B	A	A	A	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	A	A	B	A	B	A	A						A ^{140°}
Catsup (Ketchup)		C	A			A		A		A	B	X	A	A	A					A ^{140°}
Cellosolve® (Glycol Ethers) HOCH ₂ CH ₂ OR		C	C	C	X	B		A		C	A		A	A	A ^{100°}	A	A	A	A	
Cellulose Acetate C ₆ 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	B	X	A
Chlorine, Dry CL ₂		C	C		X	A		A	A	C	X	X			X	X	A	X	X	B
Chlorine, Wet Cl ₂ /H ₂ O	X	X	C	X	X	A	A	A	A	C	B	C	A	A	X	X	A	X	X	B
Chlorine, Anhydrous Liquid Cl ₂		X	X			A		A		X	X	X	X	A	X		A			X
Chlorine Dioxide ClO ₂		X	X	C		B	A	A	A	X	B		X	B	X		A			
Chlorine Trifluoride ClF ₃	X	X	X	X		B	X	A	C	X	A		A		X			X		B
Chloroacetic Acid (Monochloroacetic Acid) ClCH ₂ COOH	X	C	X	B	X	C	A	A			X	X	X	A	A	X	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°}	B	A	X

Data limited to % concentration and/or temperature °F shown. Where not shown temperature is 70°F (21 °C) Ambient.

CHEMICAL Formula	ELASTOMERS										METAL PARTS				PLASTICS					
	RUPLO TM (polyurethane)	NEOPRENE	BUNA-N	E.P.D.M.	HYTREL [®]	FLUOROCARBON (Viton [®])	BLUE GYLON [®]	PTFE, PFA	ENVELON [®]	SANTOPRENE [®]	ALUMINUM	CAST IRON/STEEL	STAINLESS STEEL	WR-C (Hastelloy Equiv.)	UNFILLED POLYPROPYLENE	ACETAL (Delrin [®])	KYNAR [®] (PVDF)	NYLON	RYTON [®]	UHMW POLYETHYLENE
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					X
Chloroform CHCl ₃	X	X	X	X	X	A		A	A	X	X	A	A	A	X	B	A	X	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		A	B	B	B	A	X	X	X	X	X	
o-Chlorophenol C ₆ H ₅ ClO		X	X	X		B		A			B	B	B	B		B	A	X	A	
Chlorothene [®] (Chlorinated Solvents) CH ₃ CCl ₃		X	X			C	A	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	A	X	10%B	B	X	B	X	X	A ^{120°}	X	A	A ^{140°}
Chromic Acid — 25%-50% H ₂ CrO ₄	X	X	X	C	X	A		A	A	X	X	B	X	B	A	X	A ^{120°}	X	A	A ^{122°}
Chromic Acid — Over 50% H ₂ CrO ₄	X	X	X	C	X	A		A	A	X	X	B	X	B	X	X	A ^{120°}	X	A	A ^{122°}
Cider (Apple Juice) Sucrose, water		A	A		B	A		A		A	B	X	A	A						A ^{140°}
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	A	A	B	X	30%A	A	B	B	A ^{250°}	X	A	A ^{140°}
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							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							A ^{140°}
Coffee Fatty oils, acids, cellulose, water		A	A					A		A	A		A	A	A					A ^{140°}

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

CHEMICAL Formula	ELASTOMERS										METAL PARTS				PLASTICS					
	RUPPLON™(Polyurethane)	NEOPRENE	BUNA-N	E.P.D.M.	HYTREL®	FLUOROCARBON (Viton®)	BLUE GYLON®	PTFE, PFA	ENVELON®	SANTOPRENE®	ALUMINUM	CAST IRON/STEEL	STAINLESS STEEL	WR-C (Hastelloy Equiv.)	UNFILLED POLYPROPYLENE	ACETAL (Delrin®)	KYNAR® (PVDF)	NYLON	RYTON®	UHMW POLYETHYLENE
Coke Oven Gas H ₂ (53%),CH ₄ (26%) N ₂ (11%),CO(7%)& hydrocarbons (3%)		C	C			A		A	A	B							A			
Copper Acetate Cu(C ₂ H ₃ O ₂) ₂ • CuO • 6H ₂ O		C	B	A				A		A	X	90%A	10%B	10%B			A			
Copper Chloride CuCl ₂ • 2H ₂ O	A	A	A	A	A	A	A	A	A	A	X	X	X	40%B	A		A			A ^{140°}
Copper Cyanide CuCN	A	A	A	A		A		A		A	X	A	10%A	A ^{170°}	A		A	A	A	A ^{140°}
Copper Fluoroborate			A	B			A				A	X	X	X	B					
Copper Nitrate Hexahydrate Cu(NO ₃) ₂ • 6H ₂ O		A	A	A		A		A			X	X	A	B	A	A	A	X	A	
Copper Sulfate (Blue Copperas) CuSO ₄ • 5H ₂ O	A	A	A	A	A	A	A	A	A	5%A	X	X	10%A	A	A	A	A	B	A	A
Copper Sulfide CuS			A			A		A												
Corn Oil (Maize oil) Glycerides of fatty acids	A	C	A	C	A	A	A	A	A	B	B	C	B		A		A	A		A ^{140°}
Cotton Seed Oil		A	C	A	A	A	A	A	A	A	B	A	C	A		A	B	A	A	A
Cream			C	A			A		A	A	A		X	A		A				
Creosote, Coal-Tar (Tar Oil) Hydrocarbon mixture	B	C	A	X	X	A	A	A	A	B	B	B	B	B	X	X		X		X
Creosote, Wood-Tar Mixture of phenols		B	A	X	X	A	A	A	A				B		X	X		X		X
Cresylic Acid (Cresol) C ₆ H ₁₀ O ₂	X	X	C	X		A		A	A	B	B	C	A	B	X	X	A ^{150°}	X		A
Crotonaldehyde CH ₃ CHCHCHO		A	X			A		A			A	A	A	A						
Cumeme (Isopropylbenzene) C ₆ H ₅ CH(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 ₆ H ₁₂	C	X	B	X	A	A		A	A	C	B	B	B	B	X	A	A	A	A	A
Cyclohexanol C ₆ H ₁₁ OH		A	B	X		A		A		B	C	B	A	A	B	A	A ^{150°}	A	A	A ^{140°}
Cyclohexanone C ₆ H ₁₀ O		X	X	C		X		A	A	C	B	B	B	B	X	A	A	A	A	B
Cyclopentane C ₅ H ₁₀		A	B	X		A		A			B	B	B	B						
Cymene (Isopropyltoluene) C ₁₀ H ₁₄		X	C	X		A		A												

Data limited to % concentration and/or temperature °F shown. Where not shown temperature is 70°F (21 °C) Ambient.

CHEMICAL Formula	ELASTOMERS										METAL PARTS				PLASTICS					
	RUPPLON™(polyurethane)	NEOPRENE	BUNA-N	E.P.D.M.	HYTREL®	FLUOROCARBON (Viton®)	BLUE GYLON®	PTFE, PFA	ENVELON®	SANTOPRENE®	ALUMINUM	CAST IRON/STEEL	STAINLESS STEEL	WR-C (Hastelloy Equiv.)	UNFILLED POLYPROPYLENE	ACETAL (Delrin®)	KYNAR® (PVDF)	NYLON	RYTON®	UHMW POLYETHYLENE
Decahydronaphthalene (Decalin®) C ₁₀ H ₁₈	X	X	X	X		A		A												
Decanal CH ₃ (CH ₂) ₈ CHO			X	X		X		A												
Decane CH ₃ (CH ₂) ₈ CH ₃	C	X	B	C		A		A		C					A ^{70°}		A			
Decyl Alcohol (Decanol) C ₁₀ H ₂₁ OH		X	A			B		A												
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		A	A	A ^{140°}
Developing Fluids & Solutions	X	A	A	C	X	A		A		A		X	A	A						A ^{140°}
Dextrose C ₆ H ₁₂ O ₆	A	B	B	A	B ^{140°}	A		A			A	X	A	A	A		A			A ^{140°}
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	A		
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	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	A	B	A	A	A	A	X		X	A	A	A
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°}		X	
Dichlorobutane C ₄ H ₆ 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 OC 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	A	C	A	A	A	A	B		A			A ^{122°}
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			A		

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

CHEMICAL Formula	ELASTOMERS										METAL PARTS				PLASTICS					
	RUPPLON™(Polyurethane)	NEOPRENE	BUNA-N	E.P.D.M.	HYTREL®	FLUOROCARBON (Viton®)	BLUE GYLON®	PTFE, PFA	ENVELON®	SANTOPRENE®	ALUMINUM	CAST IRON/STEEL	STAINLESS STEEL	WR-C (Hastelloy Equiv.)	UNFILLED POLYPROPYLENE	ACETAL (Delrin®)	KYNAR® (PVDF)	NYLON	RYTON®	UHMW POLYETHYLENE
Diethyl Amine (CH ₃ CH ₂) ₂ NH	C	C	C	C		X		A			B	B	A	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			A								
Diethyl Ether (Ether) (CH ₃ CH ₂) ₂ O	A	C	B	X	C	X		A	A	B	B	A	A	A	X	A	A	B	A	X
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							
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			A		A ^{140°}
Diethylene Triamine (NH ₂ C ₂ H ₄) ₂ NH			B					A			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	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	A	A	
Dimethyl Ether CH ₃ OCH ₃		B	A			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	A ^{120°}	B	A ^{120°}	A	A	
Dimethyl Phthalate C ₆ H ₄ (CO ₂ CH ₃) ₂		X	X	C	A	C		A		A							A ^{70°}	B	A	

Data limited to % concentration and/or temperature °F shown. Where not shown temperature is 70°F (21 °C) Ambient.

CHEMICAL Formula	ELASTOMERS										METAL PARTS				PLASTICS					
	RUPPLON™(polyurethane)	NEOPRENE	BUNA-N	E.P.D.M.	HYTREL®	FLUOROCARBON (Viton®)	BLUE GYLON®	PTFE, PFA	ENVELON®	SANTOPRENE®	ALUMINUM	CAST IRON/STEEL	STAINLESS STEEL	WR-C (Hastelloy Equiv.)	UNFILLED POLYPROPYLENE	ACETAL (Delrin®)	KYNAR® (PVDF)	NYLON	RYTON®	UHMW POLYETHYLENE
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						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												
Dipropylene Glycol (C ₃ H ₆ OH) ₂ O			A			A		A							A		A			
Dipropyl Ketone (Butyrene) (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				A		
Drycleaning Fluids Chlorinated hydrocarbons		X	C			A		A		X	A	A	A		X					
Dyes			C				A				B	B		A						
Epichlorohydrin C ₃ H ₅ ClO		X	X	B	X	X		A	A	B	X	A	A	A	A	A	X	A	A	
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	A	C	A	A	A	A	C	A		A		
Ethanolamine (Aminoethanol) H ₂ NCH ₂ • CH ₂ OH	X	C	B	B		X		A		A	B	A	A		X	X	C	A	A	A ^{140°}
Ethyl Acetate CH ₃ COOC • H ₂ CH ₃	X	X	X	B	C	X	A	A	A	C	A	A	A	A	C	A	A	A	A	B ^{122°}

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

CHEMICAL Formula	ELASTOMERS										METAL PARTS				PLASTICS					
	RUPPLON™(Polyurethane)	NEOPRENE	BUNA-N	E.P.D.M.	HYTREL®	FLUOROCARBON (Viton®)	BLUE GYLON®	PTFE, PFA	ENVELON®	SANTOPRENE®	ALUMINUM	CAST IRON/STEEL	STAINLESS STEEL	WR-C (Hastelloy Equiv.)	UNFILLED POLYPROPYLENE	ACETAL (Delrin®)	KYNAR® (PVDF)	NYLON	RYTON®	UHMW POLYETHYLENE
Ethyl Acetoacetate (Acetoacetic Ester) $\text{CH}_3\text{COCH}_2 \bullet \text{COOCH}_2\text{CH}_3$	C	X	X	C		X		A		C	A	A	A	A			A ^{70°}			
Ethyl Acrylate $\text{CH}_2\text{CHCO}_2 \bullet \text{CH}_2\text{CH}_3$	X	X	X	C		X		A		C	A	A	A	A	B		B ^{70°}			
Ethyl Alcohol (Ethanol) $\text{CH}_3\text{CH}_2\text{OH}$	X	A	A		X	B		A	A		B	B	A	A	A ^{100°}		A	X	A	A ^{140°}
Ethyl Aluminum Dichloride $\text{CH}_3\text{CH}_2\text{AlCl}_2$			X			B		A												
Ethyl Amine (Monoethylamine) $\text{CH}_3\text{CH}_2\text{NH}_2$		C	X	A		X		A			B	B	A							
Ethyl Benzene $\text{CH}_3\text{CH}_2\text{C}_6\text{H}_5$	X	X	X	X		A		A		C	B	B	B	A	X	A	A			A
Ethyl Benzoate $\text{C}_6\text{H}_5\text{CO}_2\text{CH}_2\text{CH}_3$		X	X	C		A		A		C	A	A	A	A	B			X		
Ethyl Bromide (Bromoethane) $\text{CH}_3\text{CH}_2\text{Br}$		B	X	B				A		X	A	A	A							
Ethyl Butyl Acetate $\text{CH}_3\text{CO}_2\text{CH}_2 \bullet \text{CH}(\text{C}_2\text{H}_5)_2$			X			X		A												
Ethyl Butyl Alcohol $\text{CH}_3\text{CH}(\text{C}_2\text{H}_5) \bullet (\text{CH}_2)_2\text{OH}$			A			B		A												
Ethyl Butyl Ketone $\text{CH}_3\text{CH}_2\text{COC}_4\text{H}_9$			X			X		A												
Ethyl Butyraldehyde $\text{C}_6\text{H}_{12}\text{O}$			X			X		A												
Ethyl Butyrate $\text{CH}_3\text{CH}_2\text{CH}_2 \text{ C}^{140°} \text{CO}_2\text{C}_2\text{H}_5$	X	X	X			C		A			B	A	A	A	B			A		
Ethyl Caprylate $\text{CH}_3(\text{CH}_2)_6 \bullet \text{CO}_2\text{C}_2\text{H}_5$			X	X	X				A											
Ethyl Cellosolve® $\text{C}_2\text{H}_5\text{O}(\text{CH}_2)_2\text{OH}$		C	C	B		X		A		B										
Ethyl Cellulose (Ethocel®)	B	B	B	B	B	C	A	A	A	A	B	A	B	B	C			B		
Ethyl Chloride (Chloroethane) $\text{C}_2\text{H}_5\text{Cl}$	C	C	A	A	X	A	A	A	A	C	X	B	A	B	X	A	A	B	A	X
Ethyl Chlorocarbonate (Ethyl Chloroformate) $\text{ClCO}_2\text{C}_2\text{H}_5$		C				A		A		A										
Ethyl Cyanide (Propionitrile) $\text{C}_2\text{H}_5\text{CN}$		B	X	A		X		A												
Ethyl Formate $\text{HCOOCH}_2\text{CH}_3$		B	X	C		A		A		B	B	A	B	B						C
Ethylhexyl Acetate $\text{CH}_3\text{CO}_2\text{CH}_2 \bullet \text{CH}(\text{C}_2\text{H}_5)\text{C}_4\text{H}_9$			X			X		A												
Ethylhexyl Alcohol (Ethylhexanol) $\text{C}_8\text{H}_{17}\text{OH}$			A			B		A			A	A	A	A						

Data limited to % concentration and/or temperature °F shown. Where not shown temperature is 70°F (21 °C) Ambient.

CHEMICAL Formula	ELASTOMERS										METAL PARTS				PLASTICS					
	RUPLO TM (polyurethane)	NEOPRENE	BUNA-N	E.P.D.M.	HYTREL [®]	FLUOROCARBON (Viton [®])	BLUE GYLON [®]	PTFE, PFA	ENVELON [®]	SANTOPRENE [®]	ALUMINUM	CAST IRON/STEEL	STAINLESS STEEL	WR-C (Hastelloy Equiv.)	UNFILLED POLYPROPYLENE	ACETAL (Delrin [®])	KYNAR [®] (PVDF)	NYLON	RYTON [®]	UHMW POLYETHYLENE
Ethyl Iodide $\text{CH}_3\text{CH}_2\text{I}$																				
Ethyl Isobutyrate $(\text{CH}_3)_2 \cdot \text{CHCOOCH}_2\text{CH}_3$		X	X	X				A												
Ethyl Mercaptan (Ethanethiol) $\text{CH}_3\text{CH}_2\text{SH}$		C	X	X		B		A		C	B	A	B	B						
Ethyl Oxalate $\text{C}_2\text{H}_5\text{O}_2\text{C} \cdot \text{CO}_2\text{C}_2\text{H}_5$	A	X	X	A		B		A		B										
Ethyl Pentachlorobenzene $\text{C}_2\text{H}_5\text{C}_6\text{Cl}_5$		X	X			A		A		X	X				X					
Ethyl Propionate $\text{CH}_3\text{CH}_2 \cdot \text{COOCH}_2\text{CH}_3$		X	X	X				A			A	A	A	A						
Ethyl Silicate $\text{Si}(\text{OCH}_2\text{CH}_3)_4$		A	A	A		A		A		B	B	A	A	A						
Ethyl Sulfate $\text{C}_2\text{H}_5\text{OSO}_2\text{OH}$			A			A		A		B			X					A		
Ethylene (Ethene) C_2H_4		A	B	C		A		A	A	C	A	A	A							
Ethylene Chlorohydrin $\text{ClCH}_2\text{CH}_2\text{OH}$	X	B	X	A	X	B		A		C		B	A	A	X		A ^{70°}			
Ethylene Diamine $(\text{CH}_2)_2(\text{NH}_2)_2$		A	B	A		X		A		A	C	A	A	A	A	A	B	B	A	A
Ethylene Dibromide (Ethylene Bromide) $\text{Br}(\text{CH}_2)_2\text{Br}$		X	X	C		B		A	A		X	X	B	B	X		A			
Ethylene Dichloride (Dutch Oil) $\text{Cl}(\text{CH}_2)_2\text{Cl}$	X	X	X	X	X	B		A	A	X	X	B	B	B	X	B	A	B	A	X
Ethylene Glycol (Ethylene Alcohol) (Glycol) $(\text{CH}_2\text{OH})_2$	B	A	A	A	A	A ^{70°}	A	A	A	A	A	A	A	A	A ^{120°}	A	A	B	A	A ^{140°}
Ethylene Glycol Monobutyl Ether (Butyl Cellosolve [®]) $\text{C}_4\text{H}_9\text{OCH}_2\text{CH}_2\text{OH}$	X	X	B	B		C		A			A	A	A	A						
Ethylene Glycol Monoethyl Ether Acetate (Cellosolve Acetate [®]) $\text{C}_2\text{H}_5\text{O}(\text{CH}_2)_2 \cdot \text{O}_2\text{CCH}_3$	X	X	C	B		C		A			A	A	A	A						
Ethylene Glycol Monomethyl Ether (Methyl Cellosolve [®]) $\text{CH}_3\text{O}(\text{CH}_2)_2\text{OH}$	X	C	C	B		X		A			B	B	A	A						
Ethylene Oxide $(\text{CH}_2)_2\text{O}$	X	X	X	X	A	C		A	A	A	A	B	A	A	C		A	A	X	A
Ethylene Trichloride (Trichloroethene) ClCHCCl_2		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 $\text{C}_{n+1}\text{H}_{2n+1}\text{COOH}$		C	B	X	B	A		A		B	90%A	X	A	A	B	A	A	A		A ^{140°}

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

CHEMICAL Formula	ELASTOMERS										METAL PARTS				PLASTICS					
	RUPPLON™(Polyurethane)	NEOPRENE	BUNA-N	E.P.D.M.	HYTREL®	FLUOROCARBON (Viton®)	BLUE GYLON®	PTFE, PFA	ENVELON®	SANTOPRENE®	ALUMINUM	CAST IRON/STEEL	STAINLESS STEEL	WR-C (Hastelloy Equiv.)	UNFILLED POLYPROPYLENE	ACETAL (Delrin®)	KYNAR® (PVDF)	NYLON	RYTON®	UHMW POLYETHYLENE
Ferric Chloride FeCl ₃	A	A	A	A	X	A	A	A	A	A	X	X	X	10%A	A	A	A	X	A	A ^{140°}
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	X	A	A ^{140°}
Ferric Sulfate Fe ₂ (SO ₄) ₃		A	A	A		A	A	A	A	A	C	X	B	30%A	A	B	A	X	A	A ^{140°}
Ferrous Chloride FeCl ₂		A	A	A	X	A		A		A	X	X	30%B	50%B	A	B	A	X	A	A
Ferrous Sulfate FeSO ₄		A	A	A	A	A		A		A	10%A	C	B	30%A	A	B	A	C	A	A ^{140°}
Fish Oil			A			A		A		B										
Fluoboric Acid (Fluoroboric Acid) HBF ₄		B	A	A	X	C		A		A	X	X	30%A		A		A	X	A	A ^{140°}
Fluorine (Liquid) F ₂		C	X	C	X	B	X	A	C	X	A		A		X		A ^{70°}	X		A
Fluorobenzene FC ₆ H ₅		X	X	X		A		A		C					X					
Fluorolube (Fluorocarbon Oils) F _x C _y H _z		A	C	A		B		A		X	A	A	A	A	X					
Fluosilicic Acid (Sand Acid) H ₂ SiF ₆	B	A	B	B	B	A		A		A	X	X	A ^{212°}	B	A		A	X	A	A
Formaldehyde (Formalin) HCHO	X	C	B	A	40%C	A	A	A	A	B	A	C	90%A	70%A	A	A	A ^{120°}	C	A	A ^{140°}
Formamide HCONH ₂		A	A	A		X		A			A	B	B	B						
Formic Acid HCOOH	X	B	C	B	C	C	A	A	A	A	X	X	C	A	A ^{70°}	X	A	X	A	A ^{140°}
Freon 11 (Trichlorofluoromethane) CCl ₃ F	X	C	C	X	A	B		A	A	X	B	A	A		B		A	X	A	
Freon 12 (Dichlorodifluoromethane) Cl ₂ CF ₂	A	B	B	B	A	B		A	A	X	A	A	A				A			
Freon 13 (Chlorotrifluoromethane) CICF ₃		A	A	A	C	A		A		X	A	A	A	A						
Freon 13B1(Bromotrifluoromethane) BrCF ₃	A	A	A	A		A		A	A											
Freon 14 (Tetrafluoromethane) CF ₄		X	X	B				A	A											
Freon 21 (Dichlorofluoromethane) FCHCl ₂		B	X	X		X		A	A	X	A						A			
Freon 22 (Chlorodifluoromethane) HCCIF ₂	X	B	X	C	X	X		A	A	X	A	A	A	A			A			
Freon 113 (Trichlorotrifluoroethane) (TF) Cl ₃ CCF ₃	C	A	B	X	A	B		A	A	X	B		A				A			

Data limited to % concentration and/or temperature °F shown. Where not shown temperature is 70°F (21 °C) Ambient.

CHEMICAL Formula	ELASTOMERS										METAL PARTS				PLASTICS					
	RUPPLON™(polyurethane)	NEOPRENE	BUNA-N	E.P.D.M.	HYTREL®	FLUOROCARBON (Viton®)	BLUE GYLON®	PTFE, PFA	ENVELON®	SANTOPRENE®	ALUMINUM	CAST IRON/STEEL	STAINLESS STEEL	WR-C (Hastelloy Equiv.)	UNFILLED POLYPROPYLENE	ACETAL (Delrin®)	KYNAR® (PVDF)	NYLON	RYTON®	UHMW POLYETHYLENE
Freon 114 (Dichlorotetrafluoroethane) $C_2Cl_2F_4$	A	A	A	C	A	A		A	A	X	B		A				A			
Freon 114B2 (Dibromotetrafluoroethane) $C_2Br_2F_4$		A	B	X		B		A	A	X										
Freon 115 (Chloropentafluoroethane) C_2ClF_5		A	A	A		B		A	A	X	A									
Fruit Juices Water, sucrose		A	A	A	B	A		A	A	A	0%A	X	A	A	A		A	X	A	A ^{140°}
Fuel Oils (ASTM #1 thru #9) Hydrocarbons	C	C	A	X	B	A	A	A	A	C	A	A	A	A	C	C	A	A	A	A
Fumaric Acid (Boletic Acid) $HOOCCH = CHCOOH$		B	C			A		A		A										
Furan (Furfuran) C_4H_4O		X	X	X	X	C		A		C					C		X		A	
Furfural (Ant Oil) $C_5H_4O_2$	X	B	X	B		C	A	A	A	C	A	B	20%A	B	X	B	B ^{120°}	A	A	B
Furfuryl Alcohol $C_5H_6O_2$	X		X	B	B	X		A			A	A	A	A			B ^{100°}			
Fusel Oil (Grain Oil) $(CH_3)_2 \cdot CHCH_2CH_2OH$	C	A	A	A		A		A												
Gallic Acid $C_6H_2(OH)_3 \cdot COOH$	X	C	B	B	X	A		A		B	20%A	X	B	B	A ^{70°}		A ^{70°}	B	A	A ^{140°}
Gasoline (Unleaded) C_4 to C_{12} • Hydrocarbons	X	X	X	X		A		A	A	C	A	A	A	A	C	A	A	A	A	B
Gasoline (Petrol) Hydrocarbons	B	C	A	X	A	A	A	A	A	C	A	A	A	A	C	A	A	A	A	C
Gelatin Water soluble Proteins	A	A	A	A	B	B	A	A	A	A	A	A	A		A	B	A	A		A
Ginger Oil $C_{17}H_{26}O_4$		A				A		A		C		X	A							
Glauber's Salt (Sodium Sulfate Decahydrate) $Na_2SO_4 \cdot 10H_2O$	A	A	A	B	B	A		A												
Gluconic Acid $C_6H_{12}O_7$			C			A		A			B	C	50%A		A					
Glucose (Corn Syrup) $C_6H_{12}O_6$	A	A	A	A	B	A	A	A	A	A	A	A	A		A	A	A	A		A
Glue(PVA)	A	A	A	B	B	A	A	A	A	A	A	A	B	A	A	B		A		A
Glycerol (Glycerine) $C_3H_8O_3$	A	A	A	A	A	A	A	A	A	A	A	B	A	A	A	A	A	B	A	A ^{140°}
Glycolic Acid $HOCH_2COOH$		A	A			A				A				A	A		A		A	A ^{140°}
Glycols		A	A			A		A	A	A	B	B	B		A	A	A	A	A	A ^{140°}

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

CHEMICAL Formula	ELASTOMERS										METAL PARTS				PLASTICS					
	RUPPLON™(Polyurethane)	NEOPRENE	BUNA-N	E.P.D.M.	HYTREL®	FLUOROCARBON (Viton®)	BLUE GYLON®	PTFE, PFA	ENVELON®	SANTOPRENE®	ALUMINUM	CAST IRON/STEEL	STAINLESS STEEL	WR-C (Hastelloy Equiv.)	UNFILLED POLYPROPYLENE	ACETAL (Delrin®)	KYNAR® (PVDF)	NYLON	RYTON®	UHMW POLYETHYLENE
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	A	B	A		A							
Green Sulfate Liquor		B	B	A	X	A	A	A	B	A	B	C	A	B	A					
Halowax Oil Chlorinated naphthalenes		X	X	X		A		A		X	X									
Heptanal CH ₃ (CH ₂) ₅ CHO			A			A	X				A	A	A	A	A					
Heptane C ₇ H ₁₆	B	C	A	X		A		A	A	C	A	A	A	A	C ^{140°}	A	A	A	A	A
Hexanal CH ₃ (CH ₂) ₄ CHO	C	A	X	B		C		A			A	B	A	B						
Hexalin (Cyclohexanol) C ₆ H ₁₁ OH		A	B	C		A		A												
n-Hexane C ₆ H ₁₄	B	B	A	X	A	A		A	A	A	A	A	A	A	C ^{140°}	C	A	A	A	B
n-Hexane 1 (Hexylene) H ₂ CCH(CH ₂) ₃ CH ₃	A	B	A	X		A		A		C										
Hexyl Alcohol (1-Hexanol) C ₆ H ₁₃ OH	X	B	A	C		A		A			A	A	A				A			A ^{140°}
Hexylene Glycol (Brake Fluid) C ₆ H ₁₂ (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		A		A
Hydrazine (Diamine) H ₂ NNH ₂	X	C	C	A	X	X		A	A	A	A	X	A	A	X	B	X			
Hydrobromic Acid HBr	X	C	X	A		A	A	A	A	B	A	A	A		B	X	A	X	A	A ^{140°}
Hydrochloric Acid 10% (Muratic) HCl	B	B	B	A		A		A	A	A	X	C	X	B	A	X	A	A	A	A
Hydrochloric Acid 20% (Muratic) HCl	B	B	B	A	C	A		A	A	A	X	C	X	A	A	X	A	A	A	A
Hydrochloric Acid 30% (Conc.) HCl	X	C	C	A	X	B		A	A		X	X	X	A	B	X	A	X	A	A
Hydrocyanic Acid (Formonitrile) HCN	C	C	B	A	X	A	A	A	A	B	10%A	X	A	B	A	X	A	A		A ^{122°}
Hydrogen Fluoride — Anhydrous HF	C	C	X	C		A	X	A	C		X		X	A	A		A	X		
Hydrofluoric Acid (Conc.) Cold HF	X	C		C	X	B	X	A	C	X	C	X	X	B	40%A	X	A	X	A	A ^{140°}

Data limited to % concentration and/or temperature °F shown. Where not shown temperature is 70°F (21 °C) Ambient.

CHEMICAL Formula	ELASTOMERS										METAL PARTS				PLASTICS					
	RUPPLON™(Polyurethane)	NEOPRENE	BUNA-N	E.P.D.M.	HYTREL®	FLUOROCARBON (Viton®)	BLUE GYLON®	PTFE, PFA	ENVELON®	SANTOPRENE®	ALUMINUM	CAST IRON/STEEL	STAINLESS STEEL	WR-C (Hastelloy Equiv.)	UNFILLED POLYPROPYLENE	ACETAL (Delrin®)	KYNAR® (PVDF)	NYLON	RYTON®	UHMW POLYETHYLENE
Hydrogen Peroxide — 3% H ₂ O ₂		B	B	B	X	A		A	A	A	A			A		A	X	X		A ^{122°}
Hydrogen Peroxide — 10% H ₂ O ₂		C	C	B	X	A		A	A		A	B	A	A	A		A	X	X	A ^{122°}
Hydrogen Peroxide — 30% H ₂ O ₂		X	C	B	X	A		A	A		A	X	B	A	A		A	X	X	A ^{122°}
Hydrogen Peroxide — 90% H ₂ O ₂	C	B	X	C	X	A		A	A		A	X	A					X	X	A
Hydrogen Sulfide (Wet) H ₂ S		C	X	A	A	X	A	A	A	A	90%A	X	A ^{167°}	A ^{167°}	A	C	A	X	A	A
Hydroquinone C ₆ H ₄ (OH) ₂		X	C			C		A		A	90%A	B	10%A	B			A			A ^{140°}
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	X		A ^{140°}
Ink		A	A			A		A		A	C	X	A	A						A ^{140°}
Iodine I ₂		B	B	B	B	A		A		A	A	X	X	A	A		A ^{150°}	X		B
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	A	A	A ^{140°}
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) ₈ CH ₃	B	A	B	X		A		A			B	B	B	B						
Isooctane (Trimethylpentane) C ₈ H ₁₈	B	B	A	X	A	A		A		C	A	A	A	A	A		A	A	A	
Isopentane (CH ₃) ₂ CHCH ₂ CH ₃			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					
	RUPPLON™(Polyurethane)	NEOPRENE	BUNA-N	E.P.D.M.	HYTREL®	FLUOROCARBON (Viton®)	BLUE GYLON®	PTFE, PFA	ENVELON®	SANTOPRENE®	ALUMINUM	CAST IRON/STEEL	STAINLESS STEEL	WR-C (Hastelloy Equiv.)	UNFILLED POLYPROPYLENE	ACETAL (Delrin®)	KYNAR® (PVDF)	NYLON	RYTON®	UHMW POLYETHYLENE
Isophorone $C_9H_{14}O$	C	X	X	C		X		A		B	A	A	A	A						
Isopropyl Acetate $CH_3COOCH_2(CH_3)_2$	A	X	X	B		X		A		B	A	A	A	A	B			A		
Isopropyl Alcohol (Isopropanol) $CH_3CH(OH)CH_3$	X	A	B	B	A	A		A	A		90%A	A	A	A	A	A	A	X	A	A ^{140°}
Isopropyl Amine $C_3H_7NH_2$			X			X		A				A	A							
Isopropyl Chloride $(CH_3)_2CHCl$	X	X	X	X		B		A		C	X	A	A	A	X					
Isopropyl Ether $(CH_3)_2CHOCH \cdot (CH_3)_2$	C	C	C	X		C		A		C	B		A		X		A ^{70°}	A		
Jet Fuels (JP1 to JP6) (ASTM-A, A1 & B)	C	C	A	X	A	A		A	A	C	A	A	A	A	X	A	A	A	A	
Kerosine (Kerosene) Hydrocarbons	C	C	A	X	A	A	A	A	A	C	A	A	A	A	X	A	A	A	A	C ^{140°}
Lacquers	X	X	X	X	X	X	A	A	A	C	A	B	A	A		B		A		
Lacquer Solvents	X	X	X	X	C	X	A	A	A	C	A	B	A	A	C	B	X	B		
Lactic Acid $CH_3CHOH \cdot COOH$		B	B	A	X	A	A	A	A	A	A	X	70%A	60%A	A	C	A	X	A	A ^{140°}
Lactol (Aliphatic Naptha Solvent) $CH_3CHOH \cdot CO_2C_{10}H_7$		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	A		A ^{140°}
Latex Rubber emulsion		A	A					A			A		A		A	C		A		
Lauryl Alcohol (n-Dodecanol) $CH_3(CH_2)_{10} \cdot CH_2OH$			A			B				A	A	A	A	A						A ^{140°}
Lavender Oil Ester mixture		X	B	X		B		A		B										
Lead Acetate (Sugar of Lead) $Pb(CH_3CO_2)_2$	X	A	B	A		X		A		A	X		B	B	A	A	A	B	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			A ^{125°}
Lead Sulfamate			A	B			A		A		A					A			B	
Lemon Oil (Cedro Oil) Hydrocarbons			C				A		A		C	A		A						
Ligroin (Ligroine) (Benzene) Petroleum fraction		B	A	X		A		A		B		A	A		X					
Lignin Liquor Blend of natural aromatic oils		A	A			A		A					A							

Data limited to % concentration and/or temperature °F shown. Where not shown temperature is 70°F (21 °C) Ambient.

CHEMICAL Formula	ELASTOMERS										METAL PARTS				PLASTICS					
	RUPPLON™(polyurethane)	NEOPRENE	BUNA-N	E.P.D.M.	HYTREL®	FLUOROCARBON (Viton®)	BLUE GYLON®	PTFE, PFA	ENVELO®	SANTOPRENE®	ALUMINUM	CAST IRON/STEEL	STAINLESS STEEL	WR-C (Hastelloy Equiv.)	UNFILLED POLYPROPYLENE	ACETAL (Delrin®)	KYNAR® (PVDF)	NYLON	RYTON®	UHMW POLYETHYLENE
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			B		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	A	A	B	A	A	A	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					A			
Lubricating Oils (Petroleum) Hydrocarbons	C	B ^{150°}	A	X	A	A	A	A	A	X	A	A	A	A	C	A	A	A	A	A
Lye (Potassium Hydroxide) KOH		B	C		C	B		A	B	A			A		A	X	A ^{150°}	C	A	A ^{140°}
Magnesium Carbonate MgCO ₃		A	A	C	A	A		A		A	A	B	B	B	A	A	A	A		A ^{140°}
Magnesium Chloride MgCl ₂ O	A	A	A	A	A	A	A	A	A	A	20%A	30%B	50%B	A	A	B	A	A	A	A
Magnesium Hydroxide (Milk of Magnesia) Mg(OH) ₂	A	B	B	A	C	A	A	A	A	A	10%A	A	A	A	A	A	A	B	A	A
Magnesium Nitrate Mg(NO ₃) ₂ • 6H ₂ O		A	A	A		A		A		A	50%B	B	A	B	A		A	A	A	A ^{140°}
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		A	70%A	A	50%A	A	A	A	A	A	A	A
Maleic Acid (CHCOOH) ₂		A	X	X		A		A		A	20%A	60%B	B	A	A		A	X		A ^{140°}
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					A
Mercuric Chloride HgCl ₂		B	A	A		A	A	A	A	A	X	X	X	30%B	A	B	A	X		A ^{140°}

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

CHEMICAL Formula	ELASTOMERS										METAL PARTS				PLASTICS					
	RUPPLON™(Polyurethane)	NEOPRENE	BUNA-N	E.P.D.M.	HYTREL®	FLUOROCARBON (Viton®)	BLUE GYLON®	PTFE, PFA	ENVELON®	SANTOPRENE®	ALUMINUM	CAST IRON/STEEL	STAINLESS STEEL	WR-C (Hastelloy Equiv.)	UNFILLED POLYPROPYLENE	ACETAL (Delrin®)	KYNAR® (PVDF)	NYLON	RYTON®	UHMW POLYETHYLENE
Mercuric Cyanide $\text{Hg}(\text{CN})_2$		B	B	A		A		A		A	X	B	B	B	A		A			A ^{140°}
Mercurous Nitrate $\text{Hg}_2(\text{NO}_3)_2 \cdot 2\text{H}_2\text{O}$		B	B	A		A		A			X	B	B ^{212°}	B	A		A			A ^{140°}
Mercury Hg	A	A	A	A	A	A	A	A	A	A	X	A	A	A	A	C	A	A		
Mesityl Oxide $(\text{CH}_3)_2\text{C} = \text{CHCOCH}_3$		X	X	B		X		A		C	A	A	A	A						
Methane CH_4	C	B	A	X	B	A		A	A	C	A	A	A	A	B	A	A	A		
Methyl Acetate $\text{CH}_3\text{CO}_2\text{CH}_3$		C	X	C	C	X		A		B	A	A	A	A	C	B		A		
Methyl Acetoacetate $\text{CH}_3\text{COCH}_2 \cdot \text{COOCH}_3$			X			X		A				A	A	A						
Methyl Acrylate $\text{CH}_2\text{CHCO}_2\text{CH}_3$		C		C		X		A		B		A	A				A ^{70°}			
Methyl Acrylic Acid (Crotonic Acid) $\text{CH}_3(\text{CH})_2\text{COOH}$		C		C		X		A	A											
Methyl Alcohol (Methanol) CH_3OH	X	A	A	A	A	B	A	A	A	A	B	A	A	A	A	A	A	X	A	A
Methyl Amine (Monomethylamine) CH_3NH_2		A	B	A		90%A		A			B	B	A	B	X		C			
Methyl Amyl Acetate $\text{C}_6\text{H}_{16}\text{O}_2$			A			X		A			A	A	A	A						
Methyl Amyl Alcohol $\text{C}_6\text{H}_{13}\text{OH}$			A			X		A			A	A	A	A						
Methyl Aniline $\text{C}_6\text{H}_5\text{NH}(\text{CH}_3)$		A	A	A				A												
Methyl Bromide (Bromo Methane) CH_3Br		X	C	A	X	A		A		X	X	A	A	B	X		A	X		C
Methyl Butyl Ketone (2-hexanone) $\text{CH}_3\text{COC}_4\text{H}_9$		X	X	B		X		A		C			A		X					
Methyl Butyrate $\text{CH}_3(\text{CH}_2)_2 \cdot \text{CO}_2\text{CH}_3$		X	X	X				A			A	A	A	A						
Methyl Cellosolve® $\text{CH}_3\text{OCH}_2 \cdot \text{CH}_2\text{OH}$		X	X			X		A		B	A				A		A	A		
Methyl Chloride CH_3Cl	X	X	X	C	X	B	A	A	A	X	X	A	A	A	X	B	A	B	A	C
Methyl Cyclopentane C_6H_{12}		X	B	X		A		A		C			A							
Methyl Dichloride CH_2Cl_2		X	X			A				X	X				X					
Methyl Ethyl Ketone (Butanone) $\text{CH}_3\text{CO} \cdot \text{CH}_2\text{CH}_3$	X	X	X	A	C	X		A	A	B	A	A	A	A	X	B	X	A	A	X

Data limited to % concentration and/or temperature °F shown. Where not shown temperature is 70°F (21 °C) Ambient.

CHEMICAL Formula	ELASTOMERS										METAL PARTS				PLASTICS					
	RUPPLON™(polyurethane)	NEOPRENE	BUNA-N	E.P.D.M.	HYTREL®	FLUOROCARBON (Viton®)	BLUE GYLON®	PTFE, PFA	ENVELON®	SANTOPRENE®	ALUMINUM	CAST IRON/STEEL	STAINLESS STEEL	WR-C (Hastelloy Equiv.)	UNFILLED POLYPROPYLENE	ACETAL (Delrin®)	KYNAR® (PVDF)	NYLON	RYTON®	UHMW POLYETHYLENE
Methyl Formate <chem>HCOOCH3</chem>		B	X	C		X		A		B	A	A	A							
Methyl Hexane <chem>C7H16</chem>		A	A	X		A		A												
Methyl Iodide <chem>CH3I</chem>		X	X	A				A			X	A	A	A						
Methyl Isobutyl Ketone (Hexone) <chem>CH3COCH2CH • (CH3)2</chem>		X	X	C	X	X		A	A	C	A	B	B	A	C ^{70°}	A	A ^{70°}	X	A	
Methyl Isopropyl Ketone <chem>CH3COCH(CH3)2</chem>		X	X	C	X	X		A		C			A		C		A ^{70°}			
Methyl Methacrylate <chem>CH2C(CH3) • CO2CH3</chem>		X	X	X		C		A	A	B	B		A				A ^{70°}			
Methyl Oleate <chem>C19H36O2</chem>		X	X	C		B		A		C										
Methyl Propyl Ketone <chem>CH3CH2 • CH2COCH3</chem>		X	X	B		X		A												
Methyl Salicylate (Betula Oil) <chem>HOC6H4 • COOCH3</chem>		X	X	C		B		A		B	A	A								
Methylacrylic Acid <chem>CH3CHCHCO2H</chem>		B				B		A	A	A										
Methylamine <chem>CH3NH2</chem>		A	B	A		90%A		A		A	B	B	A	B	A					
Methylene Bromide <chem>CH2Br2</chem>		X	X			B		A			X	A	A	A			A			
Methylene Chloride <chem>CH2Cl2</chem>	X	X	X	X	X	B		A	A	X	X	B	90%A	A	X		B ^{100°}	A	A	X
Milk	X	A	B	A	B	A	A	A	A	A	A	X	A	A	A	A	A	A		A
Mine Water			A					A			B		B	A						
Mineral Oil (Petroleum) Hydrocarbons	A	B	A	X	A	A	A	A	A	C	A	A	A	A	B	A	A	A	A	A
Mixed Acids (Sulfuric & Nitric) <chem>H2SO4, HNO3</chem>	X	X	X	B		A		A			X	X	B	B	X		A	C		
Molasses	X	A	A	A	B	A		A		A	A	A	A	A	A	B	A	A	A	A
Monochlorobenzene <chem>C6H5Cl</chem>		X	X		C	A		A		C	X	A	A		X	A	A ^{100°}	B	A	B
N-Methyl Aniline <chem>C6H5NHCH3</chem>		X	X			C		A							C					
Monoethanolamine <chem>NH2C2H4OH</chem>		C	B			C		A		A	B	A	A		X	X	X	A	A	
Mustard		A	C		B	X		A		A	B	X	A	A	A	A		A		
Naphtha (Petroleum Spirits) (Thinner) Petroleum fractions	C	X	A	X	A	A		A	A	C	A	B	A	A	X	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					
	RUPPLON™(Polyurethane)	NEOPRENE	BUNA-N	EP.D.M.	HYTREL®	FLUOROCARBON (Viton®)	BLUE GYLON®	PTFE, PFA	ENVELON®	SANTOPRENE®	ALUMINUM	CAST IRON/STEEL	STAINLESS STEEL	WR-C (Hastelloy Equiv.)	UNFILLED POLYPROPYLENE	ACETAL (Delrin®)	KYNAR® (PVDF)	NYLON	RYTON®	UHMW POLYETHYLENE
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	A	C	B	A	A	A	A	A	A	A	A	B
Naphthoic Acid C ₁₁ H ₈ O ₂			B	X		A		A			B	B	A	B						
Neatsfoot Oil			A	C		A		A		B			A							
Neohexane (2,2-dimethylbutane) C ₆ H ₁₄			A			A		A												
Neosol	X	A	A	B		C		A			B	B	A	A						
Neville Acid		C	C	C		B		A		A										
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	A	A	X	X	B	80%A ²⁰⁰	A	B	A	B	A	A
Nickel Nitrate Ni(NO ₃) ₂ • 6H ₂ O		A	A	A		A		A			X		A	B	A		A	A	A	A
Nickel Sulfate NiSO ₄	A	A	A	A		A	A	A	A	A	X	X	40%A	B	A	A	A	B	A	A
Nitrana (Ammonia Fertilizer)		B	B			C		A					A							
Nitric Acid — 10% HNO ₃	C	B	X	B	C	A		A	A	A	A	X	A	A	A		A	X	X	A ^{140°}
Nitric Acid — 25% HNO ₃	C	C	X	B	X	A		A	A	20%B	X	X	30%A	30%A	A		A	X	X	A ^{140°}
Nitric Acid — 35% HNO ₃	C	X	X	C	X	A	A	A	A		X	X	50%A	50%A	B		A	X	X	C ^{140°}
Nitric Acid —50% HNO ₃	C	X	X	X	X	A		A	A	C	X	X	A	X	C		A	X	X	X
Nitric Acid — 70% HNO ₃	X	X	X	X	X	A		A	A			X	A	X			A	X	X	X
Nitric Acid (Conc.) HNO ₃	X	X	X	X	X	B		A	A	C	A	X	A	40%A	X		A ^{120°}	X	X	
Nitric Acid (Red Fuming)	X	X	X	X	X	B	X	A	A	X	A	X	A	B	X		C			X
Nitrobenzene C ₆ H ₅ NO ₂	X	X	X	X	X	B	A	A	A	B	A	A	A	55%B ^{212°}	B	B	A ^{70°}	B	A	X
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		A	B	A	A	X		C			
Nitromethane CH ₃ NO ₂		C	X	C	X	X		A	A	A	A	A	A	A	C	A ^{120°}	B	A		
1-Nitropropane CH ₃ (CH ₂) ₂ NO ₂		C	X	A		X		A	A		A	A	A	A						
Octadecane CH ₃ (CH ₂) ₁₆ CH ₃	A	B	A	X		A		A		B										

Data limited to % concentration and/or temperature °F shown. Where not shown temperature is 70°F (21 °C) Ambient.

CHEMICAL Formula	ELASTOMERS										METAL PARTS				PLASTICS					
	RUPPLON™(polyurethane)	NEOPRENE	BUNA-N	E.P.D.M.	HYTREL®	FLUOROCARBON (Viton®)	BLUE GYLON®	PTFE, PFA	ENVELON®	SANTOPRENE®	ALUMINUM	CAST IRON/STEEL	STAINLESS STEEL	WR-C (Hastelloy Equiv.)	UNFILLED POLYPROPYLENE	ACETAL (Delrin®)	KYNAR® (PVDF)	NYLON	RYTON®	UHMW POLYETHYLENE
n-Octane C ₈ H ₁₈			A	X		A		A		B					X		A	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	A		A	C	B	A	B	B	A	B	A	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			X
Olein (Triolein) 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	A		A ^{140°}
Oxalic Acid (COOH) ₂		B	C	A	X	C	A	A	A	A	B	X	90%B	B	A	X	A ^{120°}	B	A	A ^{140°}
Ozone O ₃	A	B	X	A	C	A	A	A	A	A	10%A	0%A	A	A	X	C	A	X		B
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						A ^{140°}
Palmitic Acid CH ₃ (CH ₂) ₁₄ COOH	A	C	B	B	A	B	A	A	A	B	B	B	A		A		A	C		
Paraffins (Paraffin Oil) Hydrocarbons			A					A	A	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 • CHCl 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	A						
Pentane (Amyl Hydride) C ₅ H ₁₂		B	A	X	B	A		A	A	A	A	B	B					A		
Peppermint Oil		X	X			A		A		C			A							C
Perchloric Acid HClO ₄		B	X	B	X	A	A	70%A	A	C	X	X	B			C	A	X	A	A ^{140°}

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

CHEMICAL Formula	ELASTOMERS										METAL PARTS				PLASTICS					
	RUPPLON™(Polyurethane)	NEOPRENE	BUNA-N	E.P.D.M.	HYTREL®	FLUOROCARBON (Viton®)	BLUE GYLON®	PTFE, PFA	ENVELON®	SANTOPRENE®	ALUMINUM	CAST IRON/STEEL	STAINLESS STEEL	WR-C (Hastelloy Equiv.)	UNFILLED POLYPROPYLENE	ACETAL (Delrin®)	KYNAR® (PVDF)	NYLON	RYTON®	UHMW POLYETHYLENE
Perchloroethylene (Tetrachloroethylene) C ₂ Cl ₄	X	X	X	X	X	A		A	A	X	X	B	90%A	B	X	A	A	C	A	
Petroleum (Crude Oil) (Sour) Hydrocarbons	C	C	B	X	C	A	A	A	A		B	B	A	A	X	A	A	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	A	B	A	B	A	C	X	A ^{100°}	X	A	C
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 NNH ₂		X	X	X		A		A		B	A	X			X		A ^{120°}			
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	B	A	X	X	A		A ^{120°}		A	X	A	A ^{140°}
Phosphoric Acid — 20% H ₃ PO ₄	A	B	C	A		A		A	B	A	X	X	A ^{212°}	A	A ^{120°}		A	X	A	A ^{140°}
Phosphoric Acid — 50% H ₃ PO ₄	A	B	X	B		A	X	A	B	45%B	X	X	A	C	A ^{120°}		A	X	A	A ^{140°}
Phosphoric Acid (Conc.) H ₃ PO ₄	C	B	X	B	X	A		A	C		X	X	A ^{212°}		A ^{120°}		A	X	A	A ^{140°}
Phosphorus Oxychloride POCl ₃		X						A			B	B	B	B						
Phosphorus Trichloride PCl ₃		X	X	A		A		A		B	C	B	A	A	X		A		A	A ^{140°}
Photographic Developer		A	A		X	A				A	C	X	A	A	A	C	A	B	A	A ^{140°}
Pickling Solution	C	X		X		B		A		A				A						A
Picric Acid (Carbazotic Acid) (NO ₂) ₃ • C ₆ H ₂ OH	B	B	B	B	X	A		A	A	B	A	C	A	B	B		A	X		A ^{140°}
Pine Oil (Yarmor) Cyclic terpene alcohols		X	B	X		A		A		C	A	B	A							C
Pinene C ₁₀ H ₁₆	C	X	B	X		A		A	A	C										
Piperidine C ₅ H ₁₁ N		X	X	X		X		A	A	B										
Plating Solution — Cadmium			B	B					A		A			A		X		B	A	

Data limited to % concentration and/or temperature °F shown. Where not shown temperature is 70°F (21 °C) Ambient.

CHEMICAL Formula	ELASTOMERS										METAL PARTS				PLASTICS					
	RUPLO TM (polyurethane)	NEOPRENE	BUNA-N	E.P.D.M.	HYTREL®	FLUOROCARBON (Viton®)	BLUE GYLON®	PTFE, PFA	ENVELON®	SANTOPRENE®	ALUMINUM	CAST IRON/STEEL	STAINLESS STEEL	WR-C (Hastelloy Equiv.)	UNFILLED POLYPROPYLENE	ACETAL (Delrin®)	KYNAR® (PVDF)	NYLON	RYTON®	UHMW POLYETHYLENE
Plating Solution — Chrome	X	X	X	C		A		A		A					A ^{131°}	X		B	X	A ^{140°}
Plating Solution — Lead		B	B					A		A						A		B	X	C ^{140°}
Plating Solution — Others		C	A	A		B		A		A			A							A ^{140°}
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	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	A	A	A
Potassium Bisulfate KHSO ₄		A	A			A		A			10%A	X	10%A		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	A	A	
Potassium Carbonate (Potash) K ₂ CO ₃	C	A	A	A		A		A	A	A	X	B	B	90%A	A	B	A	C	A	A
Potassium Chlorate KClO ₃		A	A	A		A		A		A	X	B	60%A	20%A	A	B	A	B	A	A
Potassium Chloride KCl	A	A	A	A		A		A		A	X	B	A	30%A ^{167°}	A	B	A	B	A	A
Potassium Chromate K ₂ CrO ₄		A	A			50%A	A	A	A	A	A	A	A		A		A	A		A ^{140°}
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	A	A	C	B	90%B ^{212°}	30%B	A	C	A	A	A	A ^{140°}
Potassium Dichromate K ₂ Cr ₂ O ₇	A	A	A	A		A	A	A	A	A	A	A	A	25%B	A	C	A	X	A	A
Potassium Hydroxide (Caustic Potash) (Lye) KOH	B	B	B	A	C	B		A	B	A	X	B	A	50%B	A	C	A ^{150°}	B	A	A ^{140°}
Potassium Iodide KI		A	A	A		A		A			10%B		B	B	A		A			B
Potassium Nitrate (Saltpeper) KNO ₃	A	A	A	A		A		A	A	A	80%A	B	80%B ^{212°}	80%B ^{212°}	A	B	A	B	A	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	A	10%A	B	30%B ^{212°}	A	B	A	A	X	A	A ^{140°}
Potassium Phosphate KH ₂ PO ₄		A	A	A		A		A			X	X	30%B	10%B						
Potassium Silicate K ₂ Si ₂ O ₅		A	A	A		A		A			B	B	B	B						

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

CHEMICAL Formula	ELASTOMERS										METAL PARTS				PLASTICS					
	RUPPLON™(Polyurethane)	NEOPRENE	BUNA-N	EP.D.M.	HYTREL®	FLUOROCARBON (Viton®)	BLUE GYLON®	PTFE, PFA	ENVELON®	SANTOPRENE®	ALUMINUM	CAST IRON/STEEL	STAINLESS STEEL	WR-C (Hastelloy Equiv.)	UNFILLED POLYPROPYLENE	ACETAL (Delrin®)	KYNAR® (PVDF)	NYLON	RYTON®	UHMW POLYETHYLENE
Potassium Sulfate K_2SO_4	A	A	A	A	B	A	A	A	A	A	B	B	A	A	A	B	A	B	A	A
Potassium Sulfide K_2S	A	A	A	A		A		A			X	B	B	10%B	A		A	A	A	A ^{140°}
Potassium Sulfite $K_2SO_3 \cdot 2H_2O$		A	A	A		A		A			A	X	50%B		A		A			A ^{140°}
Propane (LPG) C_3H_8	B	B	A	X	B	A	A	A	A	C	A	A	A	A	X	A	A	C		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	X	A	A ^{140°}
n-Propyl Nitrate (NPN) $CH_3(CH_2)_2NO_3$			A	B		C	A	A		B	A	X								
Propylene C_3H_6		X	X	X		A		A	A	B	A	A	A	A						
Propylene Dichloride $CH_3CH(Cl)CH_2Cl$		X	X	X		B		A			X	A	A	B						X
Propylene Glycol (Methyl Glycol) $C_3H_6(OH)_2$		C	A	A		A		A		A	A	A	A	A	A	A	A	B	A	A ^{140°}
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				C		
Pyranol		X	A			A		A												
Pyridine $N(CH)_4CH$	X	X	X	C	X	X		A		A	A	B	A	50%A 100°	C	A	X	X	A	A
Pyroligneous Acid (Wood Vinegar)		C	C	C		A		A			B	X	10%A		A	X	A	X	A	
Pyrrole (Azole) C_4H_5N		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		A		A
Rosin Oil (Rosinol)		A	A			A		A												

Data limited to % concentration and/or temperature °F shown. Where not shown temperature is 70°F (21 °C) Ambient.

CHEMICAL Formula	ELASTOMERS										METAL PARTS				PLASTICS					
	RUPLO TM (polyurethane)	NEOPRENE	BUNA-N	E.P.D.M.	HYTREL®	FLUOROCARBON (Viton®)	BLUE GYLON®	PTFE, PFA	ENVELO [®]	SANTOPRENE®	ALUMINUM	CAST IRON/STEEL	STAINLESS STEEL	WR-C (Hastelloy Equiv.)	UNFILLED POLYPROPYLENE	ACETAL (Delrin®)	KYNAR® (PVDF)	NYLON	RYTON®	UHMW POLYETHYLENE
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		A	X	X	B	A	A	X	A	B	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	A		A ^{140°}
Salt Water (Brine) NaCl/H ₂ O	A	B	A	A	A	A		A	A	A	B	X	A	A	A		A			
Sea Water (Brine)	A	B	A	A	X	A	A	A		A	A	C	A	A	A	A	A	A	A	A ^{140°}
Sesame Seed Oil Olein, stearin, palmitin		C	A			A		A		B		A	A							
Sewage	X	B	A	C	B	A	A	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 ₂ _n	A	C	A	A	A	A		A		C	B	B	A	A	A		A	A	A	A
Silver Cyanide AgCN		A						A			X	A	A	A	A		A			A ^{140°}
Silver Nitrate AgNO ₃	A	A	B	A		A		A	A	A	X	X	60%A	60%A	A	A	A	A	A	A
Skydrol Hydraulic Fluid® (Phosphate Ester Base)		X	X	A	A	C		A		B			A	A				C		
Soap Solutions Salt of fatty acid in H ₂ O	A	B	A	A	A	A	A	A	A	A	C	X	A	A	A	A	A	A	A	A
Soda Ash (Sodium Carbonate) Na ₂ CO ₃		A	A	A	B	A	A	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	A	B	A	A
Sodium Aluminate Na ₂ Al ₂ O ₄		A	A			A		A		A		50%A	50%A	10%B	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					
	RUPPLON™(Polyurethane)	NEOPRENE	BUNA-N	EP.D.M.	HYTREL®	FLUOROCARBON (Viton®)	BLUE GYLON®	PTFE, PFA	ENVELON®	SANTOPRENE®	ALUMINUM	CAST IRON/STEEL	STAINLESS STEEL	WR-C (Hastelloy Equiv.)	UNFILLED POLYPROPYLENE	ACETAL (Delrin®)	KYNAR® (PVDF)	NYLON	RYTON®	UHMW POLYETHYLENE
Sodium Bicarbonate (Baking Soda) NaHCO ₃		A	A	A	B	A	A	A	A	A	B	C	20%A	20%A	A	X	A	B	A	A
Sodium Bisulfite (Niter Cake) NaHSO ₄		A	A	A	B	A	A	A		A	50%B	C	50%B	B	A	C	A	B	A	A
Sodium Bisulfite (Cream of Tartar) NaHSO ₃		A	C	A	B	A		A		A	B	20%B	50%A	B	A	X	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	A	A	A
Sodium Bromide NaBr								A			C	C	30%B	50%B	A		A	A		A ^{140°}
Sodium Chlorate NaClO ₃		B	A	A		A		A	A	A	70%B ^{212°}	B	B	70%B ^{212°}	A	B	A	B	A	A ^{140°}
Sodium Chloride (Table Salt) NaCl	A	A	A	A	A	A	A	A	A	A	B	30%B	A	A	A	A	A	A	A	A ^{140°}
Sodium Chromate Na ₂ CrO ₄		A	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	A	A	X	A	A		A	C	A	B	A	A
Sodium Dichromate (Sodium Bichromate) Na ₂ Cr ₂ O ₇ • 2H ₂ O	A	B		A	20%X	A		A							A		A	X	A	A ^{140°}
Sodium Fluoride NaF		A	A	A		A		A			30%B		10%B	10%B	A		A	A		A ^{140°}
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	A	50%A	X	50%B	50%A	70%B ^{212°}	A	X	A	C	X	A ^{140°}
Sodium Hypochlorite NaClO	X	B	X	C	5%A	B	A	A	A	20%A	X	X	X	10%B	X	X	A	C	X	A ^{140°}
Sodium Metaphosphate (Kurrol's Salt) Na(PO ₃)H	B	C	B	A		A		A	A	A	X		B	A	X	B		A		A
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	A	A	90%A	90%A	90%A	30%A	A	A	A	B	A	A
Sodium Nitrite NaNO ₂		X	A			A		A			A	A	A	A	A		A			A ^{140°}
Sodium Perborate NaBO ₃		B	C	A	B	A	A	A	A	A	X	10%B	A	10%B	A	B	A	B		A
Sodium Peroxide (Sodium Dioxide) Na ₂ O ₂	X	B	B	B	B	A	A	A	A	B	10%B	90%A	10%B	10%B	B	X	A	X		A ^{140°}
Sodium Phosphate (Tribasic) (TSP) Na ₃ PO ₄	A	B	B	A	B	A	A	A	B	A	X	B ^{167°}	B	A	A		A	B		A

Data limited to % concentration and/or temperature °F shown. Where not shown temperature is 70°F (21 °C) Ambient.

CHEMICAL Formula	ELASTOMERS									METAL PARTS				PLASTICS						
	RUPPLON™(Polyurethane)	NEOPRENE	BUNA-N	E.P.D.M.	HYTREL®	FLUOROCARBON (Viton®)	BLUE GYLON®	PTFE, PFA	ENVELON®	SANTOPRENE®	ALUMINUM	CAST IRON/STEEL	STAINLESS STEEL	WR-C (Hastelloy Equiv.)	UNFILLED POLYPROPYLENE	ACETAL (Delrin®)	KYNAR® (PVDF)	NYLON	RYTON®	UHMW POLYETHYLENE
Sodium Silicates (Water Glass) Na ₂ O • SiO ₂		A	A	A	A	A		A	B	A	A	A	A	B	A		A	A	A	A
Sodium Sulfate (Salt Cake) (Thenardite) Na ₂ SO ₄	A	B	A	A	A	A	A	A	A	A	30%B30%	B	A	A	A		A	B	A	
Sodium Sulfide (Pentahydrate) Na ₂ S • 5H ₂ O	A	A	A	A	A	A	A	A	A	A	30%A212°	B	30%A167°	50%B212°	A	A	A	B	A	
Sodium Sulfite Na ₂ SO ₃	A	A	A	A	A	A		A			30%A30%	X	30%A30%	30%B212°	A	A	A	B	A	
Sodium Tetraborate Na ₂ B ₄ O ₇ • 10H ₂ O				A		B	A		A		A			A		C		A	B	A
Sodium Thiosulfate (Antichlor) Na ₂ S ₂ O ₃	A	A	A	A		A	A	A	A		A	C	122°A122°	122°B122°	A	B	A	B	A	
Sorgum			A	A					A		A		A	A	A					
Soybean Oil Triglycerides of acids		C	A	A	C	A	A	A	A	A	B	A	A	A	A	B	B		A	A
Soy Sauce Fermented soya bean/wheat			A	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	A	A	X	C	10°A10°	B	A		A	B	A	
Stannous Chloride (Tin Chloride) SnCl ₂	B	A	A	B	15°B15°	A		A			X	B	10°A10°	A	A		A	B	A	
Starch *SEE NOTE BELOW C ₆ H ₁₀ O ₅		A	A	B	B	C		A	A	A	A	C	A	A	A	B		A	A	
Stearic Acid CH ₃ (CH ₂) ₁₆ CO ₂ H	A	158°B	B	B	B	A	A	A	A	B	C	C	A	B	A	C	A	A		
Stoddard Solvent Petroleum distillate	A	C	A	X	A		A	A		C	A	A	A	X	A	A	X	A		
Styrene (Vinylbenzene) C ₆ H ₅ CHCH ₂	C	X	X	X	X	A		A	A	C	A	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°A10°	X	X		X		X			
Sulfite Liquors			B	A	C	B	A		A		A				A					
Sulfur	S	B	B	X	A	A	A	A	A		A	A	A	A	B	A	A	A	A	A
Sulfur Chloride S ₂ Cl ₂		X	C	X	C	A	A	A	A	X	B	X	B	A	X		A	C		
Sulfur Dioxide SO ₂	B	A	X	B	X	A	A	A	A	A	A	B	10°A10°	80°A80°	A	B	A	C	A	
Sulfur Hexafluoride SF ₆		A	B	A	A	A	A	A		B										
Sulfur Trioxide SO ₃	B	C	C	C	X	A	A	A	A	C	B	B	B	B	X		X	A		
Sulfuric Acid 10% H ₂ SO ₄	B	A	B	A	A	A	A	A	A	A	X	X	A	A	A		A	X	X	
Sulfuric Acid 25% H ₂ SO ₄	X	B	C	B	A	A	A	A	A	A	X	X	B	A	A		150°A150°	X	X	

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

*NOTE: When using a unit in a starch application, please reference TECH BULLETIN 80.

CHEMICAL Formula	ELASTOMERS										METAL PARTS				PLASTICS					
	RUPPLON™(Polyurethane)	NEOPRENE	BUNA-N	EP.D.M.	HYTREL®	FLUOROCARBON (Viton®)	BLUE GYLON®	PTFE, PFA	ENVELON®	SANTOPRENE®	ALUMINUM	CAST IRON/STEEL	STAINLESS STEEL	WR-C (Hastelloy Equiv.)	UNFILLED POLYPROPYLENE	ACETAL (Delrin®)	KYNAR® (PVDF)	NYLON	RYTON®	UHMW POLYETHYLENE
Sulfuric Acid 50% H ₂ SO ₄	X	B	C	B	A	A	A	A	A	A	X	X	X	A	A		150° A 150°	X	X	
Sulfuric Acid 60% H ₂ SO ₄	X	C	X	B	X	A	A	A	A	A	X	X	X	A	A		150° A 150°	X	X	
Sulfuric Acid 75% H ₂ SO ₄	X	X	X	C	X	A	A	A	A	A	X	C	C	A	A		150° A 150°	X	X	
Sulfuric Acid 95% H ₂ SO ₄	X	X	X	C	X	A	A	A	B	A	X	B	A	A	X		150° A 120°	X	X	
Sulfuric Acid (Conc.) H ₂ SO ₄	X	X	X	C		A		A	B	98° B 98°	X	B	B	A	X		150° A 120°	X		
Sulfuric Acid (Fuming) H ₂ SO ₄	X	X	X	X	20% X 20%	B	A	A			C	X	B	B						
Sulfurous Acid H ₂ SO ₃	X	X	B	C	C	A	A	A	A	A	B	X	B	B	A	X	A	X	A	A ^{140°}
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		A		A
Tannic Acid C ₇₆ H ₅₂ O ₄₆	A	B	C	C	10% A	A	A	A	A	A	A	A	A	10% B	A	X	A	A	A	
Tanning Liquors Tannic acid		B	A					A		A	A		A	A	A	X				A ^{140°}
Tar, Bituminous(Coal Tar) (Pitch) Mixture of aromatic & phenolic hydrocarbons		C	B	X	X	A	A	A	A	B	A		A	A	A	A		C		
Tartaric Acid C ₄ H ₆ O ₆	A	A	B	B	B	A	A	A	A	A	20% A	X	A	90% A	A	X	A	A	A	
Terpenes C ₁₀ hydrocarbons	C	X	C	X		A		A			A	X								A
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	A	X	X				X					
Tetrabutyl Titanate Ti(C ₄ H ₉) ₄		A	B	B		A		A		B										
Tetrachloroethylene Cl ₂ C = CCl ₂								A	X								A			B
Tetrachlorodifluoroethane (Cl ₂ FC) ₂		X	X					A												
Tetrachloroethane (Acetylene Tetrachloride) (Cl ₂ HC) ₂		X	X	X		A		A		X	X	A	C	90° A 212°	X	A	A	C		

Data limited to % concentration and/or temperature °F shown. Where not shown temperature is 70°F (21 °C) Ambient.

CHEMICAL Formula	ELASTOMERS										METAL PARTS				PLASTICS					
	RUPPLON™(polyurethane)	NEOPRENE	BUNA-N	E.P.D.M.	HYTREL®	FLUOROCARBON (Viton®)	BLUE GYLON®	PTFE, PFA	ENVELO®	SANTOPRENE®	ALUMINUM	CAST IRON/STEEL	STAINLESS STEEL	WR-C (Hastelloy Equiv.)	UNFILLED POLYPROPYLENE	ACETAL (Delrin®)	KYNAR® (PVDF)	NYLON	RYTON®	UHMW POLYETHYLENE
Tetraethyl Lead $Pb(C_2H_5)_4$		X	B	X		B		A		C	B	A	A		A		A			A ^{140°}
Tetraethylene Glycol (TEG) $HOCH_2 \cdot (CH_2OCH_2)_3CH_2OH$			A			A		A												
Tetrahydrofuran (THF) C_4H_8O	C	X	X	C	C	X		A	A	B					C ^{100°}	A	B ^{70°}	A	A	B
Tetrahydronaphthalene (Tetralin) $C_{10}H_{12}$		X	X	X		A		A			A	A	A	A	C			A	A	X
Thionyl Chloride $SOCl_2$		X	X	X		B		A	A	B	C	A	A	10%A	B	B	X	X		C
Thiophene C_4H_4S		X	X	X		C		A												
Titanium Tetrachloride $TiCl_4$		X	C	X		A		A	A	X	X	A	B	B	B		B	A		
Toluene (Toluol) C_7H_8	X	X	C	X	C	B	A	A	A	C	A	A	A	A	X	B	A	A	A	X
Toluene Diisocyanate $CH_3C_6H_4(NCO)_2$		X		A	B			A		B										
Toluidine $CH_3C_6H_4 \cdot H_4NH_2$			X			B		A			A	A	A	A						
Tomato Pulp & Juice			A					A		A	B		A	A	A		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		A		A
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	A		
Triaryl Phosphate $(C_6H_5O)_3PO$		C	X			A		A												
Tributyoxyl Ethyl 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°}	B		
Dibutyl Mercaptan $(C_4H_9)_2S$		X	X			A		A		B										
Trichloroacetic Acid (TCA) CCl_3COOH		B	C	C	X	B		A	A	B	X	X	X	B	B		B	X	A	C ^{140°}
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	X	A	
Trichloroethylene (Ex-Tri) (Hi-Tri)® C_2HCl_3	X	X	X	X	X	C	A	A	A	X	X	B	90%A ^{167°}	A	X	B	A	C	A	X

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

CHEMICAL Formula	ELASTOMERS										METAL PARTS				PLASTICS					
	RUPPLON™(Polyurethane)	NEOPRENE	BUNA-N	E.P.D.M.	HYTREL®	FLUOROCARBON (Viton®)	BLUE GYLON®	PTFE, PFA	ENVELON®	SANTOPRENE®	ALUMINUM	CAST IRON/STEEL	STAINLESS STEEL	WR-C (Hastelloy Equiv.)	UNFILLED POLYPROPYLENE	ACETAL (Delrin®)	KYNAR® (PVDF)	NYLON	RYTON®	UHMW POLYETHYLENE
Trichloropropane $\text{CH}_2\text{ClCHClCH}_2\text{Cl}$		A	X			B		A		X	X	A	A	A	X					
Tricresyl Phosphate (Lindol) (TCP)® $(\text{CH}_3\text{C}_6\text{H}_4\text{O})_3 \cdot \text{PO}$	X	C	X	A	C	C		A	A	B		A	B	A	B		X	A		
Tricresyl Alcohol (Tridecanol) $\text{C}_{12}\text{H}_{25} \cdot \text{CH}_2\text{OH}$			A			B		A												
Triethanol Amine (TEA) $\text{N}(\text{C}_2\text{H}_4\text{OH})_3$	X	A	X	B	X	C		A	A	A	A	A	A	A	A	B	X	A	A	A
Triethyl Aluminum (ATE) $\text{Al}(\text{C}_2\text{H}_5)_3$		X	X			B		A	A	B										
Triethyl Amine $(\text{CH}_3\text{CH}_2)_3\text{N}$		B	A					A				A	A	A	C		A ^{120°}			
Triethyl Borane $(\text{C}_2\text{H}_5)_3\text{B}$		X	X			A		A		B										
Triethylene Glycol (TEG) $(\text{CH}_2\text{OCH}_2\text{CH}_2\text{OH})_2$			A			A		A							A			A		
Trimethylene Glycol $\text{HO}(\text{CH}_2)_3\text{OH}$			A	A		A		A			A	A	A	A						
Trinitrotoluene (TNT) $\text{CH}_3\text{C}_6\text{H}_2(\text{NO}_2)_3$		B	X	X		C		A		A										
Trioctyl Phosphate $(\text{C}_8\text{H}_{17}\text{O})_3\text{PO}$		X	X	A		B		A		B										
Tung Oil (Wood Oil) Fatty acids	C	C	A	X	B	A		A	A	B	A		A	A	A					
Turpentine $\text{C}_{10}\text{H}_{16}$	X	X	A	X	B	A	A	A	A	C	A	A	A	A	X	A	A	B	A	C
Unsymmetrical Dimethyl Hydrazine (UDMN) $\text{H}_2\text{NN}(\text{CH}_3)_2$		C	C	A		X		A		B							A			
Urea (Carbamide) $\text{CO}(\text{NH}_2)_2$		B	B		B	A		A			B		50%B		A	A	A	A	A	A
Urine		X	A			A		A		A	A	A	A	A	A	C	A	A		A ^{140°}
Valeric Acid $\text{CH}_3(\text{CH}_2)_3\text{COOH}$		X	X	A				A			A									
Vanilla Extract (Vanillin) $\text{C}_6\text{H}_5(\text{CHO}) \cdot (\text{OCH}_3)(\text{OH})$		X	A			X		A					A							A ^{140°}
Varnish Oil, gum resins, oil of turpentine		C	B	X		A		A	A		A		A	A	A		A	X		A
Vegetable Juices		C	A					A		A	C		A							
Vegetable Oils	A	C	B	A		A		A		B	A	B	A	A	X			A	A	A
Vinegar Dilute acetic acid	X	B	C	A	C	A	A	A	A	A	C	X	A	A	A	C	A	X	A	A ^{140°}
Vinyl Acetate $\text{CH}_3\text{COOC}, \text{HCH}_2$		B	X			X		A			B	A	A	A	B		A			X

Data limited to % concentration and/or temperature °F shown. Where not shown temperature is 70°F (21 °C) Ambient.

CHEMICAL Formula	ELASTOMERS										METAL PARTS				PLASTICS					
	RUPPLON™(polyurethane)	NEOPRENE	BUNA-N	E.P.D.M.	HYTREL®	FLUOROCARBON (Viton®)	BLUE GYLON®	PTFE, PFA	ENVELON®	SANTOPRENE®	ALUMINUM	CAST IRON/STEEL	STAINLESS STEEL	WR-C (Hastelloy Equiv.)	UNFILLED POLYPROPYLENE	ACETAL (Delrin®)	KYNAR® (PVDF)	NYLON	RYTON®	UHMW POLYETHYLENE
Vinyl Chloride (Chloroethylene) CH_2CHCl		X	X	C		A		A	A	X	X	A	A	A	X		B	A		
Walnut Oil		B	A			A		A												
Water, Distilled (Also Deionized) H_2O	A	C	A	A		A	A	A	A	A	A	C	A	A	A	A	A	A	A	A ^{140°}
Water, Fresh H_2O	A	B	A	A	A ^{72°}	A	A	A	A	A	A	A	A	A	A	A	A	B	A	A ^{140°}
Waxes Hydrocarbons		A	A	X				A	A		A		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	A	A	X	A	A	A	B	A	A		A
White Oil (Mineral) (Petroleum) Mixture of liquid hydrocarbons		C	A	X		A		A		C			A	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	A	A	C	X	A	A	A	B	A	A		A ^{140°}
Wort, Distillery Sugar solution from malt		A				A		A			A	B	A	A						
Xylene (Xylol) $\text{C}_6\text{H}_4(\text{CH}_3)_2$	X	X	X	X	C	A		A	A	C	A	B	B	A	X	A	A	A	A	X
Xylidines (Xylidin) $(\text{CH}_3)_2\text{C}_6\text{H}_3\text{NH}_2$		X		X		X		A		C	B	B								
Zeolite Hydrated alkali aluminum silicates		C	C	A		A		A		A			A	A						
Zinc Acetate $\text{Zn}(\text{C}_2\text{H}_3\text{O}_2)_2$		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	A	A	10%A	B	10%A	A	A	B	A	C	A	A ^{140°}
Zinc Hydrosulfite ZnHSO_3		A	A			A		A		A	X		A							
Zinc Sulfate ZnSO_4		A	A	A	X	B	A	A	A	A	20%B	X	B	90%B	A	B	A	B	A	A

Gylon and Envelon — Registered tradenames of Garlock Inc.
 Hytrel, Delrin and Viton — Registered tradenames of E.I. DuPont.
 Kynar — Registered tradename of ATOFINA Chemicals, Inc.
 Ryton — Registered tradename of Phillips Chemical Co.
 Santoprene — Registered tradename of Monsanto Corp.

SandPIPER, Marathon, Rupplon, Tranquilizer and Warren Rupp — Registered tradenames of Warren Rupp, Inc.

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