

Blagdon Pump - Chemical Resistance Chart

Chemical	Formula	Neoprene	Buna-n	EPDM	Hyrel	Viton	PTFE	Santoprene	Aluminum	Cast Iron	Stainless Steel	Polypropylene	PVDF	Nylon
1-Chloronaphthalene	C10H7Cl	X	X	X		C	A	X	X	B	B	X		
1-Nitropropane	CH3(CH2)2NO2	C	X	A		X	A		A	A	A			
Acetaldehyde (Ethanal)	CH3CHO	X	X	A	B	X	A	B	A	B	A	C	A 150°F	B
Acetamide (Acetic Acid Amide)	CH3CONH2	B	B	A		B	A	A	A	X	X	A	A 140°F	A
Acetate Solvents	CH3COOR	X	X			X	A	B	A		A	X	A	A
Acetic Acid _ 20%		B	C	A	A	C	A	B		A	A	B	X	A
Acetic Acid _ 30%		B	C	A	A	X	A	B	X	A	A			
Acetic Acid _ 50%	CH3COOH	C	C	A		C	A	B	X	A	A			
Acetic Acid _ Glacial	CH3COOH	X	C	B	A	X	A	B	B	X	A	C	A 120°F	X
Acetic Anhydride (Acetic Oxide)	(CH3CO)2O	B	C	B	C	X	A	A	B	B 90% 212°F	A	X	B 70°F	A
Acetone (Dimethylketone)	CH3COCH3	X	X	A	C	X	A	B	B	A	A	X	X	B
Acetone Cyanohydrin	(CH3)2C(OH)CN	B	X	X		X	A	A	B	B	B			
Acetonitrile (Methyl Cyanide)	CH3CN	A	C	A		X	A	A	A	A	A		A	A
Acetophenone (Phenyl Methyl Ketone)	C6H5COCH3	X	X	A		X	A	B	B	A	A	A 70°F	A	A
Acetyl Acetone (2,4-Pentanedione)	CH3COCH2COCH3	X	X	A		X	A	B	X	B	B			
Acetyl Chloride	CH3COCl	X	X	C	X	B	A	B	X	A	B	X	A	X
Acetyl Salicylic Acid (Aspirin)	(CH3OCO) C6H4COOH	X		B			A	A	X	B	B			
Acetylene (Ethyne)	HC=CH	C	A	A	A	A	A	C	A	A	A	X	A	B
Acetylene Tetrabromide (Tetra Bromoethane)	(CHBr)2	X	X			A	A	X	X	A				
Acrolein (Acrylaldehyde)	H2C=CHCHO		B			A	A	A	B	B	B			
Acrylonitrile (Vinyl Cyanide)	CH2=CHCN	X	X	X		X	A	B	A	A	A	B	A	A
Adipic Acid (1,4-Butanedicarboxylic Acid)	HOOC(CH2)4 (COOH)	X	B			A	A	B	B	B	B	A	A	A
Alcohols	R-OH				B							A	A	A
Alkazene (Chlorethyl or Polyisopropyl benzenes)		X	X	X		A	A	X						
Allyl Alcohol (2-Propen-1-ol)	CH2CHCH2OH	A	A	A		B	A	B	A	A	A		A	
Allyl Bromide (3-Bromopropene)	H2C=CHCH2Br	X	X	X		B	A		X	A				
Allyl Chloride (3-Chloropropene)	CH2=CHCH2Cl	X	X	X		B	A		X	C	B	A 70°F	A	
Almond Oil (Artificial)		X	X	B		X	A							
Alum (Aluminum Potassium Sulfate Dodecahydrate)	KAl(SO4)2 & 12H2O	A	A	A		X	A	A			B	A	A	C
Aluminum Acetate (Burow's Solution)		C	C	A		X	A	A		B	C	A		A
Aluminum Ammonium Sulfate (Alum)	AlNH4(SO4)2	B	B			A	A					A	A	
Aluminum Bromide	AlBr3	A	A				A						A	
Aluminum Chloride	AlCl3	A	A	A	B	A	A	A 20%	X	C	B	A	A	B
Aluminum Fluoride	AlF3	A	B	B		A	A	A	A 50%	C	C	A	A	A
Aluminum Hydroxide (Alumina Trihydrate)	Al(OH)3	A	A	A		C	A	A	B 10%	B 30%	B	A	A	A
Aluminum Nitrate	Al(NO3)3 & 9H2O	A	A	A		A	A	A	X		A 10%	A	A	B
Aluminum Phosphate	AlPO4	A	A	A		A	A	A						
Aluminum Potassium Sulfate (Potash Alum)	KAl(SO4)2	A	A	A		A	A	A	A 10%	X	A	A	A	X
Aluminum Sodium Sulfate (Soda Alum)	NaAl(SO4)2	A	A	A		A	A							
Aluminum Sulfate (Cake Alum)	Al2(SO4)3	A	A	A	B	A	A	A	B 30%	X	A 50% 167°F	A	A	A
Amines	R-NH2	B	X		A 70°	X		A	A		A	B		A
Ammonia Anhydrous, Liquid	NH3	B	B	A	X	X	A	A	A	A	A	A	A	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 Acetate	CH3CO2NH4	A				A	A	A	B 50%	A 50%				
Ammonium Bicarbonate	NH4HCO3	A	A	A		A	A	B	B	B 90%				
Ammonium Bifluoride _ 10%	NH4HF2	X	B				A	A	C	X	B	A	A	
Ammonium Carbonate	(NH4)2CO3	B	X	A		A	A	A	B	B	B 70% 212°F	A	A	A
Ammonium Casenite		A						A			A			
Ammonium Chloride (Sal Ammoniac)	NH4Cl	A	A	A	A	A	A	A	X	X	B	A	A	B
Ammonium Cupric Sulfate	(NH4)2Cu(SO4)2		A			A	A							
Ammonium Dichromate	(NH4)2Cr2O7	A	A	A			A	A	A	A 30%				

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Ammonium Fluoride	NH4F	B	B			A 20%	A		B 10%	B 20%	B	B	A	A
Ammonium Hydroxide (Aqua Ammonia)	NH4OH	B	B	A		B	A	A	A 30%	B 30%	A 50%	A	A	C
Ammonium Metaphosphate		A	A	A		A	A		B 90%	B	B	A	A	
Ammonium Nitrate	NH4NO3	B	A	A	B	A	A	A	B	B	A	A	A	C
Ammonium Nitrite	NH4NO2	A	A				A	A				A 70°F	A	
Ammonium Oxalate	(NH4OOC)2	A	A					A			A			
Ammonium Persulfate	(NH4)2S2O8	A	C	B		A	A	A	C	X	A	A	A	X
Ammonium Phosphate, Di-Basic	(NH4)2HPO4	A	A			A	A	A	B		A	A	A	C
Ammonium Phosphate, Monobasic	(NH4)H2PO4	A	A	A	B	A	A	A	X	X	B	A	A	
Ammonium Phosphate, Tri-Basic	(NH4)3PO4·3H2O	A	A			A	A	A	X		B	A	A	
Ammonium Sulfate	(NH4)2SO4	A	A	A	C	A	A	A	X	B	A 80% 212°F	A	A	B
Ammonium Sulfide	(NH4)2S	A	A			A	A		B		B			
Ammonium Sulfite	(NH4)2SO3·H2O		A			A	A		C	X	B	A		A
Ammonium Thiocyanate	NH4SCN	A	A	A		A	A		C	C	A 50%			
Ammonium Thiosulfate	(NH4)2S2O3	A	A	A		A	A	A	A 40%	X	A 10%			
Amyl (1-Pentanol)	C4H9CH2OH	B	B			B	A	A	B		A	B	A	A
Amyl Acetate (Banana Oil)	CH3CO2C5H11	X	X	A	C	X	A	B	A	B	A	X	A 120°F	C
Amyl Alcohol (Pentyl Alcohol)	CH3(CH2)4OH	A	B	A	A	A	A	B	A	A	A	A	A	
Amyl Borate	C5H11BO3	B	A			A	A	B						
Amyl Chloride (Chloropentane)	CH3(CH2)4Cl	X	X	X		A	A	C	X	A	A	X	A	C
Amyl Chloronaphthalene		X	B			A	A	C				A		
Amyl Naphthalene	C15H18	X	X	X		A	A	C						
Amyl Phenol	C6H4(OH)C5H11		X			A	A		A	A	A			
Aniline (Aniline Oil) (Amino Benzene)	C6H5NH2	X	X	C	X	B	A	B	B	A	A	A	A	A
Aniline Dyes		C	C	C		B	A	B	B	C	B			
Aniline Hydrochloride	C6H5NH2HCl	X	C			B	A	A	X	X	X	X	A	X
Animal Fats & Oils		C	A	B	B	A	A	C	A	X	A		A	
Animal Gelatin		A	A	A		A	A				A			
Anisole (Methylphenyl Ether)	C6H5OCH3	X				X	A		B	B	B			
Ansul Ether		X	C			X	A	X						
Anthraquinone	C14H8O2						A		B	B	B			
Anti-Freeze (Alcohol Base)		A	A	A		A	A		A	A	A			
Anti-Freeze (Glycol Base, Prestone etc)		B	A	A		A	A	A	A	A	A			
Antimony Pentachloride	SbCl5		X				A		A	A	A			
Antimony Trichloride	SbCl3		B	A		A	A		B	A	A	A	A	X
Aqua Regia (Nitric & Hydrochloric Acid)		X	X	X		B	A	X	X	X	X	C	A	X
Aroclor	PCB mixtures	X	C	X		A	A		A	B	A	X		A
Aromatic Hydrocarbons	C6H5R	X	X		C	A	A	C	A	A	A			
Aromatic Solvents (Benzene etc.)		X	C	X		B	A			B	A			
Arsenic Acid	AsH3O4	A	B	A		A	A	A	A	X	B	A	A	X
Arsenic Trichloride (Arsenic Butter)	AsCl3	A	C	X		X	A	B	B	B	X			
Ascorbic Acid	C6H8O6					A	A		A	X	A			
Askarel (Pyranol)	PCB mixtures	X	B	X		C	A	X			A			
Asphalt	Hydrocarbons	C	B	X	B	A	A	B	A	B	A	A	A	A
Asphalt Topping	Hydrocarbons	A	C		B	C	A			A	A			
ASTM _ Ref #1 Oil (High Aniline)	Hydrocarbons	B	A	X	A 212°F	A	A	A	A	A	A			
ASTM _ Ref #2 Oil (Medium Aniline)	Hydrocarbons	B	A	X	A	A	A	A	A	A	A			
ASTM _ Ref #3 Oil (Low Aniline)	Hydrocarbons	C	A	X	A 212°F	A	A	B	A	A	A			
ASTM _ Ref #4 Oil (High Aniline)	Hydrocarbons	X	B	X		A	A		A	A	A			
ASTM _ Ref Motor Fuel A (Aliphatic)	Hydrocarbons	B	A	X	A 158°F	A	A		A	A	A			
ASTM _ Ref Motor Fuel B (30% Aromatic)	Hydrocarbons	X	A	X	A 158°F	A	A		A	A	A			
ASTM _ Ref Motor Fuel C (50% Aromatic)	Hydrocarbons	X	B	X	C	A	A		A	A	A			
Aviation Gasoline		C	A	X		A	A		A	A	A			

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Barbeque Sauce	Water, oils, spices	A	A				A			X	A			
Barium Carbonate	BaCO3	A	A	A		A	A	A	X	B	B	A	A	A
Barium Chloride Dihydrate	BaCl2 & 2H2O	A	A	A		A	A		B 50%	B	B 212°F	A	A	B
Barium Cyanide	Ba(CN)2	A	C		X	A		A			A	X		A
Barium Hydroxide (Barium Hydrate)	Ba(OH)2	A	A	A	B	A	A	A	X	B	A 50% 122°F	A	A	A
Barium Nitrate	Ba(NO3)2	A	A				A	A	B	A	A	A	A	A
Barium Sulfate (Blanc Fixe)	BaSO4	A	A	A	X	A	A	A	B	B	B	A	A	A
Barium Sulfide	BaS	A	A	A		A	A	A	X		B	A	A	A
Beef Extract		A	A			A	A			X	A			
Beer	Water, carbonate	A	C	A	B	A	A	A	A	X	A	A 75°F	A 175°F	A
Beet Sugar Liquors (Sucrose)		A	A	A		A	A	A	A	B	A	A	A	A
Benzaldehyde	C6H5CHO	X	X	B	B	X	A	B	A	A	A	X	A	X
Benzene (Benzol)	C6H6	X	X	X	C70°	B	A	C	B	B	A 167°F	X	B	A
Benzene Sulfonic Acid	C6H5SO3H	A	C	C		A	A		C	A	A	X	B 100°F	X
Benzoic Acid (Benzene Carboxylic Acid)	C6H5COOH	B	X	B		A	A		B	X	B	X	A	X
Benzol (Benzene)	C6H6	X	X	X	C70°	B	A	B	B	B	A 167°F	X	B	A
Benzoyl Chloride	C6H5COCl	X	X	X		B	A		X	A	B		A	
Benzyl (Phenylcarbinol)	C6H5CH2OH	B	X			A	A	A	B		A	A	A	
Benzyl Acetate	CH3COZ CH2C6H5		X			X	A		A	A	A			
Benzyl Alcohol	C6H5CH2OH	C	X	C		A	A		A	A	A	A	A	X
Benzyl Benzoate	C6H5CO2CH2C6H5	X	X	B		A	A	C	A	B	B			
Benzyl Chloride (Chlorotoluene)	C6H5CH2Cl	X	X	X		A	A	C	X	A	B	X	A	A
Benzyl Dichloride (Benzal Chloride)	C6H5CHCl2		X				A		X	B	A			
Biphenyl (Diphenyl)	C6H5C6H5	X	X	X		A	A		A	A				
Bismuth Subcarbonate (Bismuth Carbonate)	(BiO)2CO3	A	A	A		A	A				B 10%			
Black Sulfate Liquor		A	B	A	B	A	A		C	B	A			
Blast Furnace Gas	CO,H2,CH4,CO2,N2	A	C		B	A	A	A						
Bleach Solutions	Water, chlorine, oxygen	X	X	A	C	B	A	B	X		B	X		
Borax (Sodium Borate)	B4Na2O7	A	B	A	A	A	A	A	B	B	A	A	A	A
Bordeaux Mixture	Copper sulfate salts	A	A	A	B	B	A	A			A			
Boric Acid (Boracic Acid)	H3BO3	A	A	A	A	A	A	A	A	X	A 30%	A	A	B
Brake Fluid (Non-Petroleum Base)	Silicones or glycols	A	X	A			A	A	A	A	A	X		B
Brewery Slop		A	A			A	A	A		A	A			
Brine (Sodium Chloride)	Salt water	B	A	A	B	A	A			X	A	A	A	
Bromine _ Anhydrous	Br2	X	X	C	X	A	A	C	B	C	X	X	A 150°F	
Bromine Trifluoride	BrF3	X	X	X		X	A	C	A		B	X		
Bromine Water		B	X	X		B	A	B	X	X	X	X	A	
Bromobenzene	C6H5Br	X	X	X		B	A	X	X	B	A	X		
Bromochloromethane	BrCH2Cl	X	X	B		C	A		X	B	B			
Bromotoluene	C6H4BrCH3		X			B	A		X	A	A			
Bronzing Liquid		X	X	B		X	A	A			A			
Bunker Oil (Fuel) #5, #6 & C	Hydrocarbons	B	A	X		A	A	B	A	A	A			
Butadiene	C4H6	C	X	C		C	A	C	A	A	A	X	A	A
Butane (LPG) (Butyl Hydride)	C4H10	B	A	X	A	A	A	C	A	A	A	X	A	A
Butter	Fats	C	A	A	B	A	A	B	A	X	A			
Buttermilk	Fats, water	A	A			A	A	A	A		A	A	A	B
Butyl (Butanol)	C3H7CH2OH	A	A			A	A	A	B		A	B	A	B
Butyl Acetate	CH3CO2(CH2)3CH3	X	X	B	C	X	A	B	A	A	A	X	A 100°F	A
Butyl Acetyl Ricinoleate	C24H44O5	X	C	C		B	A	B			A			
Butyl Acrylate	CH2CHCO2C4H9	X	X	X		X	A	C			A		C	
Butyl Alcohol (Butanol)	CH3(CH2)3OH	A	A	B	B	A	A	A	A	B	A	A	A	
Butyl Amine (Aminobutane)	CH3(CH2)2CH2NH2	X	B	X		X	A	A	A	A	A	X	B 70°F	A
Butyl Benzoate	C6H5COO(CH2)3CH3	X		B		A	A	C	B	B	A			

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Butyl Bromide	CH3(CH2)2CH2Br		X			B	A				A		A	
Butyl Butyrate	CH3(CH2)2 CH2CO2C4H9		X			X	A		A	A	A			
Butyl Carbitol	CH3(CH2)3OCH CH2OCH2CH2OH	B	A	A		A	A	B						
Butyl Cellosolve	HOCH2CH2OC4H9	C	B			C	A	A					B	
Butyl Chloride (Chlorobutane)	CH3(CH2)3CL		X			A	A		X	B	B	X	A	A
Butyl Ether (Dibutyl Ether)	(CH3(CH2)3)2O	B	A			C	A		A	B	A	X	A 100°F	A
Butyl Oleate	C22H42O2	X		C		A	A	C						
Butyl Stearate	CH3(CH2)16 CO2(CH2)3CH3	X	A	C		B	A	C	B	B	B		A	
Butylene (Butene)	C4H8	X	B	X		B	A	X	A		A	X	A	B
Butyraldehyde	CH3(CH2)2CHO	X	X	C		X	A	C	A	A	A			
Butyric Acid	CH3(CH2)2CO2H	X	C	C	B	C	A	A	A	X	B	A	A	C
Butyric Anhydride	(CH3CH2CH2CO)2O		C				A		A	A	A			
Butyronitrile	CH3CH2CH2CN	X	X	A				A						
Calcium Acetate Hydrate	Ca(CH3COO)2 H2O	C	B	A		X	A		C	C	B			
Calcium Bisulfite	Ca(HSO3)2	A	A	X	X	A	A		X	X	A 90%	A	A	B
Calcium Carbonate (Chalk)	CaCO3	A	A	A		A	A	A	C	B	B	A	A	A
Calcium Chlorate	Ca(ClO3)2	A	A	A		A	A		B 30%	B	B 30%	A	A	
Calcium Chloride (Brine)	CaCl2 & 6H2O	A	A	A	A	A	A	A	A	A	A	A	A	B
Calcium Hydrosulfide (Calcium Sulfhydrate)	Ca(HS)2&6H2O		A			A	A							
Calcium Hydroxide (Slaked Lime)	Ca(OH)2	A	A	A	B	A	A	A	X	B	B 50%	A	A	B
Calcium Hypochlorite 20% (Calcium Oxichloride)	Ca(ClO)2	X	C	B	A 5%	B	A	A	X	X	B	A	A	A
Calcium Nitrate	Ca(NO3)2	A	A	A		A	A	A	B 40% 212°F	B 30% 212°F	B 40% 212°F	A	A	A
Calcium Oxide (Unslaked Lime)	CaO	A	A	A	B		A		A	A	A			
Calcium Silicate	Ca2SiO4		A			A	A		A	B	B			
Calcium Sulfate (Gypsum)	CaSO4	A	A	A		A	A	A	C	B 10%	A 10%	A	A	X
Calcium Sulfide	CaS	B	A	A		A	A	A	A 20%	B	B	A 120°F	A	
Calcium Sulfite	CaSO3&2H2O		A			A	A		B 10%	B	A 10%			
Calgon	(NaPO3)6	A	A			A		A		X	A	A		
Cane Juice	Sucrose, water	A	A					A	B	A	A	X		
Cane Sugar Liquors	Sucrose, water	A	A	A	B	A	A	A	A	A	A	A	A	
Capryl Alcohol (Octanol)	CH3(CH2)6CH2OH	B	A	C		B	A		A	A	A			
Caprylic Acid (Octanoic Acid)	CH3(CH2)6 COOH		C				A		A		A		A	
Carbamate	H2NCO2R	C	C	C		A	A	A						
Carbitol	CH3CH2OCH2CH2OCH2CH2OH	C	B	C		C	A	B	A	A	A			
Carbolic Acid (see Phenol)	C6H5OH	C	X	C		A	A	A	B	A	B	C	A 150°F	X
Carbon Dioxide (Carbonic Acid Gas)	CO2	A	A	B	A	A	A	A	A	A	A	A	A	A
Carbon Disulfide (Carbon Bisulfide)	CS2	X	X	X	C	A	A	X	A	B	A 90%	X	A	B
Carbon Monoxide	CO	A	C	C	A	C	A	A	A	A	A	A	A	A
Carbon Tetrachloride (Tetrachloromethane)	CCL4	X	C	X	X	A	A	X	X	C	B	X	A	B
Carbonated Beverages	CO2/H2O	A	A			A	A	A	C		A	A	A	
Carbonic Acid (liquid)	H2CO3	A	B		C	A	A	A	A	X	B	A	A	A
Casein	a phosphoprotein	A	A	A		A	A		B		B			
Castor Oil	A mixture of fatty acids	A	A	B	B	A	A	B	A	B	A			
Catsup (Ketchup)		C	A			A	A	A	B	X	A	A		
Cellosolve (Glycol Ethers)	HOCH2CH2OR	C	C	C	X	B	A	C	A		A	A 100°F	A	A
Cellulose Acetate	C8H12O5	B	B			C	A		B	B	A			
Cellulube Hydraulic Fluids (Phosphate Esters)		X	X	A	C	B	A	X	A	A	A			
Chlorinated Lime _ 35% Bleach	CA(ClO)2	X	C	A	A 6%	A	A	X		X	A			
Chlorinated Water		C	C		X	A	A		C		B	B	A	B
Chlorine Dioxide	ClO2	X	X	C		B	A	X	B		X	X	A	
Chlorine Trifluoride	ClF3	X	X	X		B	A	X	A		A	X		X
Chlorine, Anhydrous Liquid	Cl2	X	X			A	A	X	X	X	X	X	A	
Chlorine, Dry	CL2	C	C		X	A	A	C	X	X		X	A	X

Blagdon Pump - Chemical Resistance Chart

Chemical	Formula	Neoprene	Buna-n	EPDM	Hytrel	Viton	PTFE	Santoprene	Aluminum	Cast Iron	Stainless Steel	Polypropylene	PVDF	Nylon
Chlorine, Wet	Cl ₂ /H ₂ O	X	C	X	X	A	A	C	B	C	A	X	A	X
Chloroacetic Acid (Monochloroacetic Acid)	ClCH ₂ COOH	C	X	B	X	C	A		X	X	X	A	A	X
Chloroacetone (Monochloroacetone)	ClCH ₂ cOCH ₃	C	X	A		C	A	C	X	B	B	X		
Chlorobenzene (Monochlorobenzene)	C ₆ H ₅ Cl	X	X	X	X	A	A	C	X	B	B	X	A 150°F	B
Chlorobromomethane	ClCH ₂ Br	X	X			A	A	X	X	A	B	X		
Chlorobutadiene (Chloroprene)	C ₄ H ₅ CL	X	X	X		A	A	C	X	B	B	X		
Chloroform	CHCl ₃	X	X	X	X	A	A	X	X	B	A	X	A	X
Chlorosulfonic Acid	HSO ₃ CL	X	X	X	X	X	A	A	B	B	B	X	X	X
Chlorothene (Chlorinated Solvents)	CH ₃ CCl ₃	X	X			C	A		X	B	A			
Chlorotrifluoroethylene	C ₂ H ₂ ClF ₃		X				A		B	X	B			
Chocolate syrup	Corn syrup, water, sugar	A	A				A	A		B	A	A		
Chromic Acid _ 25%-50%	H ₂ CrO ₄	X	X	C	X	A	A	A	X	B	X	X	A 120°F	X
Chromic Acid _ Over 50%	H ₂ CrO ₄	X	X	C	X	A	A	A	X	X	X	X	A 120°F	X
Chromic Acid _ To 25%	H ₂ CrO ₄	X	X	A	X	A	A	A	B 10%	B	X	X	A 120°F	X
Cider (Apple Juice)	Sucrose, water	A	A		B	A	A	A	B	X	A			
Cinnamon Oil	Cinnamic acid esters	C					A	C		X	A			
Citric Acid	C ₆ H ₈ O ₇ H ₂ O	A	B	A	A	A	A	A	X	X	A 30%	B	A 250°F	X
Citric Oils	Citric acid esters	X	C	B		A	A	C		X	A	A		
Citrus Pectin Liquor		A	A			A	A				A			
Clorox		B	C			A	A	B		X	A	B		
Clove Oil (Eugenol)	C ₁₀ H ₁₂ O ₂	C					A	C		X	A			
Cobalt Chloride	CoCl ₂ &6H ₂ O	A	A	C		A	A	A	X			A		
Coconut Oil (Coconut Butter)	Fatty acid mixture	B	B	A		A	A	B	B	A	A			
Cod Liver Oil (Fish Oil)	Glycerides, acids, esters	B	B	A		A	A	C	A	X	A			
Coffee	Fatty oils, acids, ellulose, water	A	A				A	A	A		A	A		
Coke Oven Gas	H ₂ (&5&3%), CH ₄ (&2&6%), N ₂ (&1&1%),	C	C			A	A	B					A	
Copper Acetate	Cu(c ₂ H ₃ O ₂) ₂ CuO &6H ₂ O	C	B	A			A	A	X	A 90%	B 10%		A	
Copper Chloride	CuCl ₂ &2H ₂ O	A	A	A	A		A	A	X	X	X	A	A	
Copper Cyanide	CuCN	A	A	A		A	A	A	X	A	A 10%	A	A	A
Copper Fluoroborate		A	B			A		A	X	X	X			
Copper Nitrate Hexahydrate	Cu(NO ₃) ₂ &6H ₂ O	A	A	A		A	A	A	X	X	A	A	A	X
Copper Sulfate (Blue Copperas)	CuSO ₄ &5H ₂ O	A	A	A	A		A	A	A 5%	X	X	A 10%	A	B
Copper Sulfide	CuS		A			A		A						
Corn Oil (Maize oil)	Glycerides of fatty acids	C	A	C	A	A	A	B	B	C	B	A	A	A
Cotton Seed Oil		C	A	A	A	A	A	B	A	C	A	A	A	A
Cream		C	A			A		A		X	A	A		
Creosote, Coal-Tar (Tar Oil)	Hydrocarbon mixture	C	A	X	X	A	A	B	B	B	B	X		X
Creosote, Wood-Tar	Phenol mixture	B	A	X	X	A	A				B	X		X
Cresylic Acid (Cresol)	C ₈ H ₁₀ O ₂	X	C	X		A	A	B	B	C	A	X	A 150°F	X
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			
Cutting Oil (Sulfur Base)		C	A				A		A	A	A			
Cutting Oil (Water Soluble)		X	C			A		A	A	A	A			
Cyclohexane	C ₆ H ₁₂	X	B	X	A	A	A	C	B	B	B	X	A	A
Cyclohexanol	C ₆ H ₁₁ OH	A	B	X		A	A	B	C	B	A	B	A 150°F	A
Cyclohexanone	C ₆ H ₁₀ O	X	X	C		X	A	C	B	B	B	X	A	A
Cyclopentane	C ₅ H ₁₀	A	B	X		A	A		B	B	B			
Cymene (Isopropyltoluene)	C ₁₀ H ₁₄	X	C	X		A		A						
Decahydronaphthalene (Decalin)	C ₁₀ H ₁₈	X	X	X		A		A						
Decanal	CH ₃ (CH ₂) ₈ CHO		X	X		X		A						
Decane	CH ₃ (CH ₂) ₈ CH ₃	X	B	C		A		A	C			A 70°F	A	
Decyl Alcohol (Decanol)	C ₁₀ H ₂₁ OH	X	A			B		A						
Denatured Alcohol	Ethanol and denaturant	B	A	A		B		A	B	B	A	A	A	

Blagdon Pump - Chemical Resistance Chart

Chemical	Formula	Neoprene	Buna-n	EPDM	Hytrel	Viton	PTFE	Santoprene	Aluminum	Cast Iron	Stainless Steel	Polypropylene	PVDF	Nylon
Detergent Solutions		A	A	A	B	A	A	B	B		A	A		A
Developing Fluids & Solutions		A	A	C	X	A	A	A		X	A			
Dextrose	C6H12O6	B	B	A	B 140°	A	A	A	A	X	A	A	A	
Diacetone (Tyranton)	(CH3)2C(OH) CH2COCH3	X	X	B		X	A	C	A	A	A	X	A	A
Diacetone Alcohol (Diacetone)	(CH3)2COHCH2 COCH3	X	X	B	C	X	A	B	A	A	A	X	C	A
Dibenzyl Ether	(C6H5CH2)2O	X	X	C		C	A	C	B		B		C	
Dibenzyl Sebecate	C24H30O4	X	X	C	A	B	A	C						
Dibutyl Amine	(C4H9)2NH	X	C	X		X	A	B		A	A	X	B 70°F	
Dibutyl Mercaptan	(C4H9)2S	X	X			A	A	B						X
Dibutyl Phthalate (DBP)	C6H4(CO2C4H9)2	X	X	A	A	B	A	B	A	A	A	X	X	A
Dibutyl Sebecate (DBS)	C18H34O4	X	X	C		C	A	B		A	A	C		
Dichloro Isopropyl Ether	C6H12OC12	X	X	X		X	A	X				X		
Dichloroacetic Acid	Cl2CHCOOH	X	X			X	A							
Dichlorobutane	C4H8Cl2		X			A	A		X	B	B			
Dichloroethyl Ether	[ClCH2CH2]2O		X				A		B					
Dicyclohexylamine	(C6H11)2NH	X	X	X		B	A	B						
Diesel Oil (Fuel ASTM #2)	Hydrocarbons	C	A	X	B	A	A	C	A	A	A	B	A	
Diester Synthetic Oils		X	B	X		A	A		A	A	A			
Diethanol Amine	(HOCH2CH2)2NH	A	B				A			A	A	A		A
Diethyl Amine	(CH3CH2)2NH	C	C	C		X	A		B	B	A	A	A	A
Diethyl Benzene	C6H4(C2H5)2	X	X	X		A	A							
Diethyl Carbonate	(C2H5O)2CO	X	X				A	C		A				
Diethyl Ether (Ether)	(CH3CH2)2O	C	B	X	C	X	A		B	A	A	X	A	B
Diethyl Phthalate (DEP)	C6H4(CO2C2H5)2		X			C	A	B	A	A	A			
Diethyl Sebecate	C14H26O4	X	X	C	A	B	A	A	A	A	A	A 120°F	A 120°F	
Diethylene Ether (Dioxane)	C4H8O2	X	X	A		X	A	B	A	A	A			
Diethylene Glycol (DEG)	HOCH2CH2OCH2CH2OH	A	A	A	A	A	A		A	A	A	A		A
Diethylene Triamine	(NH2C2H4)2NH		B				A	A	A	A	A			
Diisobutyl Ketone	C4H9COC4H9	X	X	B		X	A		A	A	A			
Diisobutylene	[HC=C(CH3)2]2	C	B			C	A	C				A	A	A
Diisodecyl Adipate (DIDA)	C26H50O4		X			C	A							
Diisodecyl Phthalate (DIDP)	C28H47O4	X	X	A		C	A							
Diisooctyl Adipate (DIOA)	C22H42O4		X			C	A		A	A	A			
Diisooctyl Phthalate (DIOP)	C24H39O4		X			C	A							
Diisooctyl Sebecate (DIOS)	C26H46O4			B		A	A							
Diisopropyl Amine	[(CH3)2CH]2NH		B				A							
Diisopropyl Benzene	C4H4 [CH(CH3)2]2	X	X	X		A	A	C						
Diisopropyl Ketone	[(CH3)2CH]2CO	X	X	A		X	A	C			A			
Dimethyl Ether	CH3OCH3	B	A			A	A		B	B	B			
Dimethyl Phthalate	C6H4(CO2CH3)2	X	X	C	A	C	A	A					A 70°F	B
Dimethyl Sulfate	(CH3)2SO4		X			X	A			A				
Dimethyl Sulfide	(CH3)2S		X				A		A	A	A			
Dinitrotoluene (DNT)	CH3C6H3(NO2)2	X	X	X		C	A	B			A			
Diocetyl Phthalate (DOP)	C24H38O4	X	X	B	A	B	A	C	A	A	A			
Diocetyl Sebecate	C26H50O4	X	X	C		C	A	C	A	A	A			
Dioxolanes (Dioxolans)	Glycol ethers	X	X	B		C	A	C						
Dipentene (Limonene)	C10H16	X	C	X		A	A	C	A	A	A			
Diphenyl Oxides (Phenyl Ether)	C6H5OC6H5	X	X	C		A	A	C	B	A	A		A	
Dipropyl Ketone (Butyrene)	(C3H7)2CO		X				A							
Dipropylamine	(CH3CH2CH2)2 NH		B				A							
Dipropylene Glycol	(C3H6OH)2O		A			A	A					A	A	
Dispersing Oil #10		X	X	X		C	A		A	A	A			
Divinyl Benzene (DVB)	C6H4(CH=CH)2		X			A	A							

Blagdon Pump - Chemical Resistance Chart

Chemical	Formula	Neoprene	Buna-n	EPDM	Hyrel	Viton	PTFE	Santoprene	Aluminum	Cast Iron	Stainless Steel	Polypropylene	PVDF	Nylon
Dodecyl Benzene (Alkane)	C6H5(CH2)11CH3		X			A	A		A	A	A			
Dow Corning (Silicones)	[(CH3)2SiO]2	A	A			A	A		A					
Dowtherm (Biphenyl & Phenyl Ether)	(C6H5)2 and (C6H5)2O	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				A		B	B		A			
Epichlorohydrin	C3H5ClO	X	X	B	X	X	A	B	X	A	A	A	X	A
Epsom Salts (Magnesium Sulfate)	MgSO4 & 7H2O	A	A			A	A	A	A		A	A	A	
Ethane	C2H6	C	A	X		A	A	C	A	A	A	C		A
Ethanolamine (Aminoethanol)	H2NCH2 CH2OH	C	B	B		X	A	A	A	A	A	X	C	A
Ethyl (Ethanol)	CH3CH2OH	A	A		X	B	A	B	B	B	A	A 100°F	A	X
Ethyl Acetate	CH3COOC H2CH3	X	X	B	C	X	A	C	B	A	A	C	A	A
Ethyl Acetoacetate (Acetoacetic Ester)	CH3COCH2 COOCH2CH3	X	X	C		X	A	C	A	A	A		A 70°F	
Ethyl Acrylate	CH2CHCO2CH2CH3	X	X	C		X	A	C	A	A	A	B	B 70°F	
Ethyl Alcohol (Ethanol)	CH3CH2OH	A	A		X	B	A		A	B	A	A 100°F	A	X
Ethyl Aluminum Dichloride	CH3CH2AlCl2		X			B	A		B					
Ethyl Amine (Monoethylamine)	CH3CH2NH2	C	X	A		X	A		B	B	A			
Ethyl Benzene	CH3CH2C6H5	C	X	X		A	A	C	B	B	B	X	A	
Ethyl Benzoate	C6H5CO2CH2CH3	X	X	C		A	A	C	A	A	A	B		X
Ethyl Bromide (Bromoethane)	CH3CH2Br	B	X	B				X	A	A	A			
Ethyl Butyl Acetate	CH3CO2CH2CH(C2H5)2		X			X	A							
Ethyl Butyl Alcohol	CH3CH(C2H5) (CH2)2OS		A			B	A							
Ethyl Butyl Ketone	CH3CH2COC4H9		X			X	A							
Ethyl Butyraldehyde	C6H12O		X			X	A							
Ethyl Butyrate	CH3CH2CH2 CO2C2H5	X	X	X		C	A		B	A	A	B		A
Ethyl Caprylate	CH3(CH2)6 CO2C2H5	X	X	X			A							
Ethyl Cellosolve	C2H5O(CH2)2OH	C	C	B		X	A	B						
Ethyl Cellulose (Ethocel)		B	B	B	B	C	A	A	B	A	B	C		B
Ethyl Chloride (Chloroethane)	C2H5Cl	C	A	A	X	A	A	C	X	B	A	X	A	B
Ethyl Chlorocarbonate (Ethyl Chloroformate)	ClC12C2H5	C				A	A	A						
Ethyl Cyanide (Propionitrile)	C2H5CN	B	X	X		X	A							
Ethyl Formate	HCOOCH2 CH3	B	X	C		A	A	B	B	B	B			
Ethyl Iodide	CH3CH2I													
Ethyl Isobutyrate	(CH3)2 CHCOOCH2CH3	X	X	X			A							
Ethyl Mercaptan (Ethanethiol)	CH3CH2SH	C	X	X		B	A	C	B	B	B			
Ethyl Oxalate	C2H5O2C CO2C2H5	X	X	A		B	A	B						
Ethyl Pentachlorobenzene	C2H5C6Cl5	X	X			A	A	X	X			X		
Ethyl Propionate	CH3CH2 COOCH2CH3	X	X	X			A		A	A	A			
Ethyl Silicate	Si(OCH2CH3)4	A	A	A		A	A	B	B	A	A			
Ethyl Sulfate	C2H5OSO2OH		A			A	A	B		X	X			A
Ethylene (Ethene)	C2H4	A	B	C		A	A	C	A	A	A			
Ethylene Chlorohydrin	ClCH2CH2OH	B	X	A	X	B	A	C		A	A	X	A 70°F	
Ethylene Diamine	(CH2)2(NH2)2	A	B	A		X	A	A	C	A	A	A	B	B
Ethylene Dibromide (Ethylene Bromide)	Br(CH2)2Br	X	X	C		B	A		X	B	B	X	A	
Ethylene Dichloride (Dutch Oil)	Cl(CH2)2Cl	X	X	X	X	B	A	X	X	B	B	X	A	B
Ethylene Glycol (Ethylene Alcohol, Glycol)	(CH2OH)2	A	A	A	A	A 70°F	A	A	A	A	A	A 120°F	A	B
Ethylene Glycol Monobutyl Ether (Butyl Cellosolve)	C4H9OCH2CH2OH	X	B	B		C	A		A	A	A			
Ethylene Glycol Monoethyl, Ether Acetate (Cellosol)	C2H5O(CH2)2 O2CCH3	X	C	B		C	A		A	A	A			
Ethylene Glycol Monomethyl, Ether (Methyl Cellosol)	CH3O(CH2)2OH	C	C	B		X	A		B	B	A			
Ethylene Oxide	(CH2)2O	X	X	X	A	C	A	A	A	B	A	C	A	A
Ethylene Trichloride (Trichloroethene)	ClCHCl2	X	X	X		A	A	X	X	A	A	X		
Ethylhexyl Acetate	CH3CH2CH2 CH(C2H5)C4H9		X			X	A							
Ethylhexyl Alcohol (Ethylhexanol)	C8H17OH		A			B	A		A	A	A			
Ethylidene Chloride	CH3CHCl2	X	X	X			A		X	B	A			

Blagdon Pump - Chemical Resistance Chart

Chemical	Formula	Neoprene	Buna-n	EPDM	Hyrel	Viton	PTFE	Santoprene	Aluminum	Cast Iron	Stainless Steel	Polypropylene	PVDF	Nylon
Fatty Acids	C _n H _{2n} +1COOH	C	B	X	B	A	A	B	A 90%	X	A	B	A	A
Ferric Chloride	FeCl ₃	A	A	A	X	A	A	A	X	X	X	A	A	X
Ferric Hydroxide	FeHO ₂		B			C	A							
Ferric Nitrate	Fe(NO ₃) ₃	A	A	A		A	A	A	X	X	B	A	A	X
Ferric Sulfate	Fe ₂ (SO ₄) ₃	A	A	A		A	A	A	C	X	B	A	A	X
Ferrous Chloride	FeCl ₂	A	A	A	X	A	A	A	X	X	B 30%	A	A	X
Ferrous Sulfate	FeSO ₄	A	A	A	A	A	A	A	A 10%	C	B	A	A	C
Fish Oil			A			A	A	B						
Fluoboric Acid	HBFB ₄	B	A	A	X	C	A	A	X	X	A 30%	A	A	X
Fluorine (Liquid)	F ₂	C	X	C	X	B	A	X	A		A	X	A 70°F	X
Fluorobenzene	FC ₆ H ₅	X	X	X		A	A	C				X		
Fluorolube (Fluorocarbon Oils)	FxCyHz	A	C	A		B	A	X	A	A	A	X		
Fluosilicic Acid (Sand Acid)	H ₂ SiF ₆	A	B	B	B	A	A	A	X	X	A 212°F	A	A	X
Formaldehyde (Formalin)	HCHO	C	B	A	C 40%	A	A	B	A	C	A 90%	A	A 120°F	C
Formamide	HCONH ₂	A	A	A		X	A		A	B	B			
Formic Acid	HCOOH	B	C	B	C	C	A	A	X	X	C	A 70°F	A	X
Freon 11 (Trichlorofluoromethane)	CCl ₃ F	C	C	X	A	B	A	X	B	A	A	B	A	X
Freon 113 (Trichlorotrifluoroethane) (TF)	C ₁₃ CCF ₃	A	B	X	A 130°F	B	A	X	B		A		A	
Freon 114 (Dichlorotetrafluoroethane)	C ₂ Cl ₂ F ₄	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					A	
Freon 115 (Chloropentafluoroethane)	C ₂ ClF ₅	A	A	A		B	A	X	A					
Freon 12 (Dichlorodifluoromethane)	Cl ₂ CF ₂	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			
Freon 13B1 (Bromotrifluoromethane)	BrCF ₃	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	
	HCClF ₂	B	X	C	X	X	A	X	A	A	A		A	
Fruit Juices	Water, sucrose	A	A	A	B	A	A	A	A 10%	X	A	A	A	X
Fuel Oils (ASTM #1 thru #9)	Hydrocarbons	C	A	X	B	A	A	C	A	A	A	C	A	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	B	X	B		C	A	C	A	B	A 20%	X	B 120°F	A
Furfuryl Alcohol	C ₅ H ₆ O ₂		X	B	B	X	A		A	A	A		B 100°F	
Fusel Oil (Grain Oil)	(CH ₃) ₂ CHCH ₂ CH ₂ OH	A	A	A		A	A							
Gallic Acid	C ₆ H(OH) ₃ COOH	C	B	B	X	A	A	B	A 20%	X	B	A 70°F	A 70°F	B
Gasoline (Petrol)	Hydrocarbons	C	A	X	A	A	A	C	A	A	A	C	A	A
Gasoline (Unleaded)	C ₄ TO C ₁₂ hydrocarbons	X	X	X		A	A	C	A	A	A	C	A	A
Gelatin	Water soluble proteins	A	A	A	B	B	A	A	A	A	A	A	A	A
Ginger Oil	C ₁₇ H ₂₆ O ₄	A				A	A	C		X	A			
Glauber's Salt (Sodium Sulfate Decahydrate)	NA ₂ SO ₄ & 10H ₂ O	A	A	B	B	A	A							
Gluconic Acid	C ₆ H ₁₂ O ₇		C			A	A		B	C	A 50%			
Glucose (Corn Syrup)	C ₆ H ₁₂ O ₆	A	A	B	B	A	A	A	A	A	A	A	A	A
Glue		A	A	B	B	A	A	A PVA	A	A	B	A	A	A
Glycerol (Glycerine)	C ₃ H ₈ O ₃	A	A	A	A	A	A	A	A	B	A	A	A	B
Glycolic Acid	HOCH ₂ COOH	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			
Grape Juice	Water, sucrose	X	C			A	A	A		X	A	A	A	
Grapefruit Oil		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	A		
Halowax Oil	Chlorinated naphthalenes	X	X	X		A	A	X	X					
Heptanal	CH ₃ (CH ₂) ₅ CHO		A			A			A	A	A	A		

Blagdon Pump - Chemical Resistance Chart

Chemical	Formula	Neoprene	Buna-n	EPDM	Hytrel	Viton	PTFE	Santoprene	Aluminum	Cast Iron	Stainless Steel	Polypropylene	PVDF	Nylon
Heptane	C7H16	C	A	X		A	A	C	A	A	A	C 140°F	A	A
Hexalin (Cyclohexanol)	C6H11OH	A	B	C		A	A							
Hexanal	CH3(CH2)4CHO	A	X	B		C	A		A	B	A			
Hexyl (1-Hexanol)	C5H11CH2OH	B	A			A	A	B	A		A	A 70°F	A	
Hexyl Alcohol (1-Hexanol)	C6H13OH	B	A	C		A	A		A	A	A		A	
Hexylene Glycol (Brake fluid)	C6H12OH	A	A	C		A	A		A	A	A			
Honey		A						A	A	A	A	A		
Hydraulic Oil (Petroleum base)	Hydrocarbons	B	A	X	X	A	A	X	A	A	A	X		A
Hydrazine (Diamine)	H2NNH2	C	C	A	X	X	A	A	A	X	A	X	X	
Hydrobromic Acid	HBr	C	X	A		A	A	B	X	X	X	B	A	X
Hydrochloric Acid 10% (Muratic)	HCl	B	B	A		A	A	A	X	C	X	A	A	A
Hydrochloric Acid 20% (Muratic)	HCl	B	B	A	C	A	A	A	X	C	X	A	A	A
Hydrochloric Acid 30% (Conc.)	HCl	C	C	A	X	B	A		X	X	X	B	A	X
Hydrocyanic Acid (Formonitrile)	HCN	C	B	A	X	A	A	B	A 10%	X	A	A	A	A
Hydrofluoric Acid (Conc.) Cold	HF	C		C	X	B	A	X	C	X	X	X	A	X
Hydrogen Fluoride _ Anhydrous	HF	C	X	C		A	A		X		X	A	A	X
Hydrogen Peroxide _ 10%	H2O2	C	C	B	X	A	A		A	B	A	A	A	X
Hydrogen Peroxide _ 3%	H2O2	B	B	B	X	A	A	A	A			A	A	X
Hydrogen Peroxide _ 30%	H2O2	X	C	B	X	A	A		A	X	B	A	A	X
Hydrogen Peroxide _ 90%	H2O2	B	X	C	X	A	A		A	X	A			X
Hydrogen Sulfide (Wet)	H2S	C	X	A	A	X	A	A	A 90%	X	A 167°F	A	A	X
Hydroquinone	C6H4(OH)2	X	C			C	A	A	A 90%	B	A 10%		A	
Hydroxyacetic Acid _ 10%	HOCH2COOH	X	X				A	A 70%	B		B			
Hypochlorous Acid	HClO	X	X	B		A	A	A	X	X	X	A	A	X
Ink		A	A			A	A	A	C	X	A			
Iodine	I2	B	B	B	B	A	A	A	A	X	X	A	A 150°F	X
Iodoform	CHI3			A			A	B	A	A	A		A	
Isoamyl Acetate	CH3CO2CH2CH2CH(CH3)2	X	X	B		X	A		A	A	A			
Isoamyl Alcohol	(CH3)XCHCH2CH2OH	A	A	A		A	A							
Isoamyl Butyrate	C9H18O2		X			X	A		A	A	A			
Isoamyl Chloride	(CH3)2 CHCH2CH2Cl	X	X	X		A	A		X					
Isobutyl (2-Methyl-1-Propanol)	C3H7CH2OH	A	C			A	A	A	B		A		A	
Isobutyl Acetate	CH3CO2CH2 CH(CH3)2	X	X	C		X	A		A	A	A			
Isobutyl Alcohol (Isobutanol)	(CH3)2 CHCH2OH	B	B	A		A	A		A			A	A	A
Isobutyl Amine	(CH3)2 CHCH2NH2		X			X	A							
Isobutyl Chloride	(CH3)2 CHCH2Cl		X			B	A		X	B	B			
Isobutyric Acid	(CH3)2 CHCOOH	B	X	A			A		A					
Isododecane	(CH3)2 CH(CH2)8CH3	A	B	X		A	A		B	B	B			
Isooctane (Trimethylpentane)	C8H18	B	B	X	A	A	A	C	A	A	A	A	A	A
Isopentane	(CH3)2CHCH2CH3		A			A	A							
Isophorone	C9H14O	X	X	C		X	A	B	A	A	A			
Isopropyl (2-Propanol)	H3CCH(OH)CH3	B	C			A	A	B	B	C	A	A	A 150°F	
Isopropyl Acetate	CH3COOCH(CH3)2	X	X	B		X	A	B	A	A	A	B		A
Isopropyl Alcohol (Isopropanol)	CH3CH(OH)CH3	A	B	B	A	A	A		A 90%	A	A	A	A	X
Isopropyl Amine	C3H7NH2		X			X	A			A	A			
Isopropyl Chloride	(CH3)2CHCl	X	X	X		B	A	C	X	A	A	X		
Isopropyl Ether	(CH3)2CHOCH(CH3)2	C	C	X		C	A	C	B		A	X	A 170°F	A
Jet Fuels (JP1 to JP6) (ASTM-A, A1 & B)		C	A	X	A JP4	A	A	C	A	A	A	X	A	A
Kerosine (Kerosene)	Hydrocarbons	C	A	X	A	A	A	C	A	A	A	X	A	A
Lacquer Solvents		X	X	X	C	X	A	C	A	B	A	C	X	B
Lacquers		X	X	X	X	X	A	C	A	B	A			A
Lactic Acid	CH3CHOHCOOH	B	B	A	X	A	A	A	A	X	A 70%	A	A	X
Lactol (Aliphatic Naptha Solvent)	CH3CHOH CO2C10H7	X	C			A	A		A	A	A			

Blagdon Pump - Chemical Resistance Chart

Chemical	Formula	Neoprene	Buna-n	EPDM	Hytrel	Viton	PTFE	Santoprene	Aluminum	Cast Iron	Stainless Steel	Polypropylene	PVDF	Nylon
Lard (Lard Oil)	Olein, stearin	C	A	X	B	A	A	B	A	A	B	A	A	A
Latex	Rubber emulsion	A	A				A		A		A	A		A
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	A	B	A		X	A	A	X		B		A	B
Lead Chloride	PbCl ₂	B					A		X		B	A	A	
Lead Nitrate	Pb(NO ₃) ₂	A	B	A		A	A		X	B	B	A	A	
Lead Sulfamate		A	B			A	A	A				A		B
Lemon Oil (Cedro Oil)	Hydrocarbons	C				A	A	C	A		A			
Lignin Liquor	Blend of nautal aromatic oils	A	A			A	A				A			
Ligroin (Ligroine) (Benzine)	Petroleum fraction	B	A	X		A	A	B		A	A	X		
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
Lime, Soda (Slaked Lime & Soda Ash)	CaO	B	B	A		B	A	A						
Limonene	C ₁₀ H ₁₆	X	C	X		A	A							
Lindol (Tritolyl Phosphate)	C ₂₁ H ₂₁ O ₄ P	C	X			B	A	A						
Linoleic Acid	C ₁₈ H ₃₂ O ₂	X	B	X		B	A	B	A		A	A	A	
Linseed Oil (Flaxseed Oil)	Glycerides	A	A	C	B	A	A	B	A	A	A	A	A	A
Lithium Bromide	LiBrH ₂ O	X	A			A	A			A			A	
Lubricating Oils (Petroleum)	Hydrocarbons	B 150°	A	X	A	A	A	X	A	A	A	C	A	A
Lye (Potassium Hydroxide)	KOH	B	C		C	B	A				A	A	A 150°F	C
Magnesium Carbonate	MgCO ₃	A	A	C	A	A	A	A	A	B	B	A	A	A
Magnesium Chloride	MgCl ₂ O	A	A	A	A	A	A	A	A 20%	B 30%	B 40%	A	A	A
Magnesium Hydroxide (Milk of Magnesia)	Mg(OH) ₂	B	B	A	C	A	A	A	A 10%	A	A	A	A	B
Magnesium Nitrate	Mg(NO ₃) ₂ & 6H ₂ O	A	A	A		A	A	A	B 50%	B	A	A	A	A
Magnesium Oxide	MgO	A	A			B	A	A	A 10%	A	A			
Magnesium Sulfate (Epsom Salts)	MgSO ₄ &7H ₂ O	A	A	A	B	A	A	A	A 70%	A	A 40%	A	A	A
Maleic Acid	(CHCOOH) ₂	A	X	X		A	A	A	A 20%	B 60%	B	A	A	X
Maleic Anhydride	C ₄ H ₂ O ₃			X		A	A	A	A 20%	B	A			
Malic Acid (Apple Acid)	C ₄ H ₆ O ₅	C	B	X		A	A	A	B		A			
Maple Sugar Liquors (Sucrose)	Water, sucrose	A	A	A		A	A				A			
Mayonnaise	Water, fats, oils	A	A				A	A	X	X	A	A		
Mercuric Chloride	HgCl ₂	B	A	A		A	A	A	X	X	X	A	A	X
Mercuric Cyanide	Hg(CN) ₂	B	B	A		A	A	A	X	B	B	A	A	
Mercurous Nitrate	Hg(NO ₃) ₂ & 2H ₂ O	B	B	A		A	A		X	B	B 212°F	A	A	
Mercury	Hg	A	A	A	A	A	A	A	X	A	A	A	A	A
Mesityl Oxide	(CH ₃) ₂ C = CHCOCH ₃	X	X	B		X	A	C	A	A	A			
Methane	CH ₄	B	A	X	B	A	A	C	A	A	A	B	A	A
Methyl (Methanol)	CH ₃ OH	A	A	X		X	A	A	B	A	A	A 120°F	A	
Methyl Acetate	CH ₃ CO ₂ CH ₃	C	X	C	C	X	A	B	A	A	A	C		A
Methyl Acetoacetate	CH ₃ COCH ₂ COOCH ₃		X			X	A			A	A			
Methyl Acrylate	CH ₂ CHCO ₂ CH ₃	C		C		X	A	B		A	A		A 70°F	
Methyl Acrylic Acid (Crotonic Acid)	CH ₃ (CH) ₂ COOH	C		C		X	A							
Methyl Alcohol (Methanol)	CH ₃ OH	A	A	A	A	B	A	A	B	A	A	A	A	X
Methyl Amine (Monomethylamine)	CH ₃ NH ₂	A	B	A		A 90%	A		B	B	A	X	C	
Methyl Amyl Acetate	C ₈ H ₁₆ O ₂		A			X	A		A	A	A			
Methyl Amyl Alcohol	C ₆ H ₁₃ OH		A			X	A		A	A	A			
Methyl Aniline	C ₆ H ₅ NH(CH ₃)	A	A	A		A	A							
Methyl Bromide (Bromo Methane)	CH ₃ Br	X	C	A	X	A	A	X	X	A	A	X	A	X
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			
Methyl Cellosolve	CH ₃ OCH ₂ CH ₂ OH	X	X			X	A	B	A			A	A	A

Blagdon Pump - Chemical Resistance Chart

Chemical	Formula	Neoprene	Buna-n	EPDM	Hytrel	Viton	PTFE	Santoprene	Aluminum	Cast Iron	Stainless Steel	Polypropylene	PVDF	Nylon
Methyl Chloride	CH3Cl	X	X	C	X	B	A	X	X	A	A	X	A	B
Methyl Cyclopentane	C6H12	X	B	X		A	A	C			A			
Methyl Dichloride	CH2Cl2	X	X			A		X	X			X		
Methyl Ethyl Ketone (Butanone)	CH3COCH2CH3	X	X	A	C	X	A	B	A	A	A	X	X	A
Methyl Formate	HCOOCH3	B	X	C		X	A	B	A	A	A			
Methyl Hexane	C7H16	A	A	X		A								
Methyl Iodide	CH3I	X	X	A				A	X	A	A			
Methyl Isobutyl Ketone (Hexone)	CH3COCH2CH(CH3)2	X	X	C	X	X	A	C	A	B	B	C 70°F	A 70°F	X
Methyl Isopropyl Ketone	CH3COCH(CH3)2	X	X	C	X	X	A	C				C	A 70°F	
Methyl Methacrylate	CH2C(CH3)CO2CH3	X	X	X		C	A	B	B			A	A 70°F	
Methyl Oleate	C19H36O2	X	X	C		B	A	C						
Methyl Propyl Ketone	CH3CH2CH2COCH3	X	X	B		X	A							
Methyl Salicylate (Betula Oil)	HOC6H4 COOCH3	X	X	C		B	A	B	A	A				
Methylacrylic Acid	CH3CHCHCO2H	B				B	A	A						
Methylamine	CH3NH2	A	B	A		A 90%	A	A	B	B	A	A		
Methylene Bromide	CH2Br2	X	X			B	A		X	A	A		A	
Methylene Chloride	CH2Cl2	X	X	X	X	B	A	X	X	B	A 90%	X	B 100°F	A
Milk		A	B	A	B	A	A	A	A	X	A	A	A	A
Mine Water			A					A	B		B			
Mineral Oil (Petroleum)	Hydrocarbons	B	A	X	A	A	A	C	A	A	A	B	A	A
Mixed Acids (Sulfuric & Nitric)	H2SO4, HNO3	X	X	B		A	A		X	X	B	X	A	C
Molasses		A	A	A	B	A	A	A	A	A	A	A	A	A
Monochlorobenzene	C6H5Cl	X	X		C	A	A	C	X	A	A	X	A 100°F	B
Monoethanolamine	NH2C2H4OH	C	B			C	A	A	B	A	A	X	X	A
Mustard		A	C		B	X	A	A	B	X	A	A		A
N,N-Dimethyl Formamide (DMF)	HCON(CH3)2	X	C		C	X	A	A	A			A 120°F	A 120°F	A
N,N-Dimethylaniline	C6H5N(CH3)2	X	X	C		X	A	B	B			X	A	A
n-Amyl Amine (1-Aminopentane)	CH3(CH2)4NH2	X	C	X		X	A							
Naphtha (Petroleum Spirits) (Thinner)	Petroleum fractions	X	A	X	A	A	A	C	A	B	A	X	A	A
Naphtha Coal Tar (Benzol)	Hydrocarbons	X	X	X		A	A		A	B	A			
Naphthalene (Tar Camphor)	C10H8	X	X	X	C	A	A	C	B	A	A	A	A	A
Naphthoic Acid	C11H8O2		B	X		A	A		B	B	A			
n-Butyl Acetate	CH3CO2(CH2)3CH3	X	X	X		X	A	A	A	A	A			
Neatsfoot Oil			A	C		A	A	B				A		
Neohexane (2,2-dimethylbutane)	C6H14		A			A	A							
Neosol		A	A	B		C	A		B	B	A			
Neville Acid		C	C	C		B	A	A						
n-Hexane	C6H14	B	A	X	A	A	A	A	A	A	A	C 140°F	A	A
n-Hexane 1 (Hexylene)	H2CCH(CH2)3CH3	B	A	X		A	A	C						
Nickel Acetate	Ni(CH3CO2)2	B	B	A		X	A	A	B 10%			A	A	A
Nickel Chloride	NiCl2	A	A	A	X	A	A	A	X	X	B	A	A	B
Nickel Nitrate	Ni(NO3)2·6H2O	A	A	A		A	A		X			A	A	A
Nickel Sulfate	NiSO4	A	A	A		A	A	A	X	X	A 40%	A	A	B
Nitrana (Ammonia Fertilizer)		B	B			C	A							
Nitric Acid (Conc.)	HNO3	X	X	X	X	B	A	C	A	X	A	X	A 120°F	X
Nitric Acid (Red Fuming)		X	X	X	X	B	A	X	A	X	A	X	C	
Nitric Acid _ 10%	HNO3	B	X	B	C	A	A	A	A	X	A	A	A	X
Nitric Acid _ 25%	HNO3	C	X	B	X	A	A	B 20%	X	X	A 30%	A	A	X
Nitric Acid _ 35%	HNO3	X	X	C	X	A	A		X	X	A 40%	B	A	X
Nitric Acid _ 50%	HNO3	X	X	X	X	A	A	C	X	X	A	C	A	X
Nitric Acid _ 70%	HNO3	X	X	X	X	A	A			X	A		A	X
Nitrobenzene	C6H5NO2	X	X	X	X	B	A	B	A	A	A	B	A 70°F	B
Nitroethane	C2H5NO2	C	X	C		X	A	A	A	A	A	C	A 70°F	

Blagdon Pump - Chemical Resistance Chart

Chemical	Formula	Neoprene	Buna-n	EPDM	Hytrel	Viton	PTFE	Santoprene	Aluminum	Cast Iron	Stainless Steel	Polypropylene	PVDF	Nylon
Nitrogen Tetroxide	N2O4	X	X	X	B 50%	C	A		A	B	A	X	C	
Nitromethane	CH3NO2	C	X	C	X	X	A	A	A	A	A	C	A 120°F	B
N-Methyl Aniline	C6H5NHCH3	X	X			C	A					C		
n-Octane	C8H18		A	X		A	A	B				X	A	A
n-Propyl Acetate	CH3COO(CH2)2CH3	X	X	A		X	A	B	A		A	C	A	
n-Propyl Nitrate (NPN)	CH3(CH2)2NO3		A	B		C	A	B	A	X				
o-Chlorophenol	C6H5ClO	X	X	X		B	A		B	X	B		A	X
Octachlorotoluene	C7Cl8	X	X			A	A		X			X		
Octadecane	CH3(CH2)16CH3	B	A	X		A	A	B						
Octyl (Caprylic Alcohol)	C7H15 CH2OH	B	B			A	A	B	A		A			
Octyl Acetate	CH3COO(CH3)7CH3		X			X	A		A		A			
o-Dichlorobenzene	C6H4Cl2	X	X	X	X	A	A	X	X	B	B	B	A 150°F	
Oleic Acid (Red Oil)	C18H34O2	X	C	C	A	B	A		A	C	B	B	A	B
Olein (Trioleine)	C57H104O6	C	B				A							
Oleum (Fuming Sulfuric Acid)	H2SO4/SO3	X	C		X 25%	A	A	X	X	X	A	X	X	
Olive Oil	Mixed glycerides of acids	C	A	C		A	A	B	A	A	A	A	A	A
Oxalic Acid	(COOH)2	B	C	A	X	C	A	A cold	B	X	B 90%	A	A 120°F	B
Ozone	O3	B	X	A	C	A	A	A	A 10%	A 10%	A	X	A	X
Paint Thinner, DUCCO	Hydrocarbons	C	A	X		B	A	C	X		A	X		
Paints & Solvents		X	X				A		X		A			
Palm Oil	Mixture of terpenes	C	A			A	A	B		A	A			
Palmitic Acid	CH3(CH2)14 COOH	C	B	B	A	B	A	B	B	B	A	A	A	C
Paraffins (Paraffin Oil)	Hydrocarbons		A				A	A	A		A	A		A
Paraformaldehyde	(CH2O)n	B	B			C	A		A 10%	A	A			
Paraldehyde	C6H12O3	B	C			X	A		A	A	A			
Peanut Oil	Glycerides of fatty acids	B	A	A		A	A	B		A	A	A 70°F	A	
Pentachloroethane (Pentalin)	C12 CHCCl3	X	X	X		A	A		X	A	A			
Pentachlorophenol (PCP)	C6Cl5OH	X	X	X		A	A		A	A	A			
Pentane (Amyl Hydride)	C5H12	B	A	X	B	A	A	A	A	B	B			A
Peppermint Oil		X	X			A	A	C			A			
Perchloric Acid	HClO4	B	X	B	X	A	A 70%	C	X	X	B		A	X
Perchloroethylene (Tetrachloroethylene)	C2Cl4	X	X	X	X	A	A	A	X	B	A 90%	X	A	C
Petroleum (Crude Oil) (Sour)	Hydrocarbons	C	B	X	C	A	A		B	B	A	X	A	A
Phenethyl Alcohol (Benzyl Carbinol)	C6H5(CH2)2OH	X	X	B		X	A		A	A	A			
Phenol (Carbolic Acid)	C6H5OH	C	X	C	X	A	A	A	B	A	B	C	A 100°F	X
Phenyl Acetate	CH3COOC6H5	X	X	B		X	A							
Phenyl Ethyl Ether (Phenetole)	C6H5OC2H5	X	X	X		C	A	C						
Phenyl Hydrazine	C6H5NHNH2	X	X	X		A	A	B	A	X		X	A 120°F	
Phenyl Sulfonic Acid	C6H4(OH)SO3H		X			X	A		B	B	B			
Phenylbenzene	C6H5	X	X			A	A	C						
Phorone (Diisopropylidene Acetone)	C9H14O	X	X	C		A	A	B						
Phosphoric Acid (Conc.)	H3PO4	B	X	B	X	A	A		X	X	A 212°F	A 120°F	A	X
Phosphoric Acid _ 10%	H3PO4	B	A	A		A	A	A	X	X	A	A 120°F	A	X
Phosphoric Acid _ 20%	H3PO4	B	C	A		A	A	A	X	X	A 212°F	A 120°F	A	X
Phosphoric Acid _ 50%	H3PO4	B	X	B		A	A	B 45%	X	X	A	A 120°F	A	X
Phosphorus Oxychloride	POCl3	X					A		B	B	B			
Phosphorus Trichloride	PCl3	X	X	A		A	A	B	C	B	A	X	A	
Photographic Developer		A	A		X	A		A	C	X	A	A	A	B
Pickling Solution		X		X		B	A	A						
Picric Acid (Carbazotic Acid)	(NO2)3 C6H2OH	B	B	B	X	A	A	B	A	C	A	B	A	X
Pine Oil (Yarmor)	Cyclic terpene alcohols	X	B	X		A	A	C	A	B	A			
Pinene	C10H16	X	B	X		A	A	C						
Piperidine	C5H11N	X	X	X		X	A	B						

Blagdon Pump - Chemical Resistance Chart

Chemical	Formula	Neoprene	Buna-n	EPDM	Hytrel	Viton	PTFE	Santoprene	Aluminum	Cast Iron	Stainless Steel	Polypropylene	PVDF	Nylon
Plating Solution _ Cadmium		B	B				A	A			A	X	B	A
Plating Solution _ Chrome		X	X	C		A	A	A				A 131°F		B
Plating Solution _ Lead		B	B				A	A						B
Plating Solution _ Others		C	A	A		B	A	A			A			
Polyvinyl Acetate Emulsion	PVac + H2O	C		A			A	A		B			A	
Potassium Acetate	CH3CO2K	B	B	A		X	A	A	B 10%	A	B	A	A	
Potassium Bicarbonate	KHCO3	A	A			A	A	A	B	B 40%	A 30%	A	A	A
Potassium Bisulfate	KHSO4	A	A			A	A		A 10%	X	A 10%	A	A	
Potassium Bisulfite	KHSO3	A	A			A	A		B 10%		B 105			
Potassium Bromide	KBr	A	A	A		A	A	A		B 80% 212°F	B 90% 212°F	A	A	A
Potassium Carbonate (Potash)	K2CO3	A	A	A		A	A	A	X	B	B	A	A	C
Potassium Chlorate	KClO3	A	A	A		A	A	A	X	B	A 60%	A	A	B
Potassium Chloride	KCl	A	A	A		A	A	A	X	B	A	A	A	B
Potassium Chromate	K2CrO4	A	A			A 40%	A	A	A	A	A	A	A	A
Potassium Copper Cyanide	K3[Cu(CN)4]	A	A	A		A	A					A	A	
Potassium Cyanide	KCN	A	A	A		A	A	A	C	B	B 90% 212°F	A	A	A
Potassium Dichromate	K2Cr2O7	A	A	A		A	A	A	A	A	A	A	A	X
Potassium Hydroxide (Caustic Potash) (Lye)	KOH	B	B	A	C	B	A	A	X	B	A	A	A 150°F	B
Potassium Iodide	KI	A	A	A		A	A		B 10%		B	A	A	
Potassium Nitrate (Saltpeter)	KNO3	A	A	A		A	A	A	A 80%	B	B 80% 212°F	A	A	B
Potassium Nitrite	KNO2	A	A	A	B	A	A		B	B	B	A		
Potassium Permanganate (Purple Salt)	KMnO4	C	C	A	X	B	A	A	A 10%	B	B 30% 212°	B	A	X
Potassium Phosphate	KH2PO4	A	A	A		A	A		X	X	B 30%			
Potassium Silicate	K2Si2O5	A	A	A		A	A		B	B	B			
Potassium Sulfate	K2SO4	A	A	A	B	A	A	A	B	B	A	A	A	B
Potassium Sulfide	K2S	A	A	A		A	A		X	B	B	A	A	A
Potassium Sulfite	K2SO3·2H2O	A	A	A		A	A		A	X	B 50%	A	A	
Propane (LPG)	C3H8	B	A	X	B	A	A	C	A	A	A	X	A	C
Propionaldehyde (Propanal)	C2H5CHO		X			X	A		A	A	A			
Propionic Acid (Methylacetic Acid)	CH3CH2CO2H	X	X	A		A	A		A	X	B			
Propyl (Propanol)	C2H5CH2OH	A	A			A	A	A	A		A	A	A 120°F	
Propyl Alcohol (1-Propanol)	CH3CH2CH2OH	B	B	A		A	A		A	A	A	A	A	X
Propylene	C3H6	X	X	X		A	A	B	A	A	A			
Propylene Dichloride	CH3CH(Cl)CH2Cl	X	X	X		B	A		X	A	A			
Propylene Glycol (Methyl Glycol)	C3H6(OH)2	C	A	A		A	A	A	A	A	A	A	A	B
Propylene Oxide	C3H6O	X		C		X	A	A	B	B	A	X	X	
Pydraul (Phosphate Eser Base Fluid)		X	X	B	A	A	A	A		A	A			C
Pyranol		X	A			A	A							
Pyridine	N(CH)4CH	X	X	C	X	X	A	A	A	B	A	C	X	X
Pyroigneous Acid (Wood Vinegar)		C	C	C		A	A	A	B	X	A 10%	A	A	X
Pyrrrole (Azole)	C4H5N	X	X	X		C	A	C						
Quaternary Ammonium Salts	NH4 (X)	A	A			A	A			X	A			
Quench Oil		B	B			A	A		A		A			
Rape-Seed Oil (Colza Oil)		C	B	A		A	A	B		A	A			
Rose Oil	Geraniol, citronellol	C				A	A	A			A			
Rosin	C20H30O2	C	A			A	A	A	A		A	A		A
Rosin Oil (Rosinol)		A	A			A	A							
Rotenone	C23H22O6	A	A	A		A	A							
Rubber Latex Emulsions	(C5H8)n/H2O					A	A		A		A			
Rubber Solvents (Petroleum Distillate)	Hydrocarbons	C	X			X	A		A		A			
Rum (Alcoholic liquor from molasses)		A	A	A		B	A	A			A			
Rust Inhibitors		C	A			A		B			A	A		
Sal Ammoniac (Ammonium Chloride)	NH4Cl	A	A	A	A	A	A	A	X	X	B	A	A	B

Blagdon Pump - Chemical Resistance Chart

Chemical	Formula	Neoprene	Buna-n	EPDM	Hyrel	Viton	PTFE	Santoprene	Aluminum	Cast Iron	Stainless Steel	Polypropylene	PVDF	Nylon
Sal Soda (Sodium Carbonate)	NaCO3	A	A	A		A	A		X	A	A			
Salad Dressing	Fats, oils, water		A			A		A	B	X	A	A		
Salicylic Acid		B	B	A		B	A		A	X	B	A	A	A
Salt Water (Brine)	NaCl/H2O	B	A	A	A	A	A	A	B	X	A	A	A	
Sea Water (Brine)		B	A	A	X	A	A	A	A	C	A	A	A	A
Sesame Seed Oil	Olein, stearin, palmitin	C	A			A	A	B		A	A			
Sewage		B	A	C	B	A	A	A	B	B	A	A	A	
Silicate Esters	Si(OR)4	A	B	X	C	A	A	B						
Silicone Oils (Versilube etc.)	[(CH3)2SiO2]n	C	A	A	A	A	A	C	B	B	A	A	A	A
Silver Cyanide	AgCN	A							X	A	A	A	A	
Silver Nitrate	AgNO3	A	B	A		A	A	A	X	X	A 60%	A	A	A
Skydrol Hydraulic Fluid (Phosphate Ester Base)		X	X	A		C	A	B			A			C
Soap Solutions	Salt of fatty acid in H2O	B	A	A	A	A	A	A	C	X	A	A	A	A
Soda Ash (Sodium Carbonate)	Na2CO3	A	A	A	B	A	A	A	X	A	A			
Sodium Acetate	CH3COONa	C	C	A		X	A	A	A	A	A	A	A	B
Sodium Aluminate	Na2Al2O4	A	A			A	A	A		A 40%	A 40%	A	A	A
Sodium Bicarbonate (Baking Soda)	NaHCO3	A	A	A	B	A	A	A	B	C	A 20%	A	A	B
Sodium Bisulfite (Cream of Tartar)	NaHSO3	A	C	A	B	A	A	A	A	B 20%	A 50%	A	A	X
Sodium Bisulfite (Niter Cake)	NaHSO4	A	A	A	B	A	A	A	B 50%	C	B 50%	A	A	B
Sodium Borate	Na2B4O7	A	A	A	B	A	A	A	B		A	A 140°F	A	A
Sodium Bromide	NaBr							A	C	C	B 30%	A	A	A
Sodium Chlorate	NaClO3	B	A	A		A	A	A	B 70% 212°F	B	B	A	A	B
Sodium Chloride (Table Salt)	NaCl	A	A	A	A	A	A	A	B	B 30%	A	A	A	A
Sodium Chromate	Na2CrO4	A	A		A	A	A	A	A 80% 212°F	A 60%	A 60%	A	A	A
Sodium Cyanide	NaCN	A	A	A	A	A	A	A	X	A	A	A	A	B
Sodium Dichromate (Sodium Bichromate)	Na2Cr2O7&2H2O	B		A	X 20%	A	A					A	A	X
Sodium Fluoride	NaF	A	A	A		A	A		B 30%			A	A	A
Sodium Hexametaphosphate (Calgon)	(NaPO3)6	B	B	B		A	A		C	B	B			
Sodium Hydroxide (Caustic Soda) (Lye)	NaOH	B	B	A	X	X	A	A 50%	X	B 50%	B 50%	A	A	C
Sodium Hypochlorite	NaClO	C	X	C	A 5%	B	A	A 20%	X	X	X	X	A	C
Sodium Metaphosphate (Kurrol's Salt)	NA(PO3)H	A	B	A		A	A	A	X			X		A
Sodium Metasilicate	Na2SiO3	B	A			A		A	B		A	A	A	
Sodium Nitrate (Chile Saltpeter)	NaNO3	X	C	A	B	A	A	A	A 90%	A 90%	A 90%	A	A	B
Sodium Nitrite	NaNO2	B	A			A	A	A	A	A	A	A	A	
Sodium Perborate	NaBO3	B	C	A	B	A	A	A	X	B 10%	A	A	A	B
Sodium Peroxide (Sodium Dioxide)	Na2O2	B	B	B	B	A	A	B	B 10%	A 90%	B 10%	B	A	X
Sodium Phosphate (Tribasic) (TSP)	Na3PO4	A	B	A	B	A	A	A	X	B 167°F	B	A	A	A
Sodium Silicates (Water Glass)	Na2O SiO2	B	A	A	A	A	A	A	A	A	A	A	A	A
Sodium Sulfate (Salt Cake) (Thenardite)	Na2SO4	A	A	A	A	A	A	A	B 30%	B	A	A	A	B
Sodium Sulfide (Pentahydrate)	Na2S &5H2O	A	A	A	A	A	A	A	A 30% 212°F	B	A 30% 167°F	A	A	B
Sodium Sulfite	Na2SO3	A	A	A	A	A	A	A	A 30%	X	A 30%	A	A	B
Sodium Tetraborate	Na2B4O7 &1&0H2O		A		B	A	A	A			A	C	A	B
Sodium Thiosulfate (Antichlor)	Na2S2O3	A	A	A		A	A	A	A	C	A 122°F	A	A	B
Sorghum		A	A					A	A	A	A			
Soy Sauce	Fermented soya bean/wheat	A	A					A	A	X	A			
Soybean Oil	Tricyclerides of acids	A	A	C	A	A	A	B	A	A	A	B		A
Sperm Oil (Whale Oil)	Fatty acid esters	X	A			A	A	B	A	A	A			
Stannic Chloride (Tin Chloride)	SnCl4	B	A	B	B	A	A	A	X	C	A 10%	A	A	B
Stannous Chloride (Tin Chloride)	SnCl2	A	A	B	B 15%	A	A	A	X	B	A 10%	A	A	B
Starch	C6H10O5	A	A	B	B	C	A	A	A	C	A	A		A
Stearic Acid	CH3(CH2)16CO2H	B 158°	B	B	B	A	A	B	C	C	A	A	A	A
Stoddard Solvent	Petroleum distillate	C	A	X	A			A	C	A	A	A	X	A
Styrene (Vinylbenzene)	C6H5CHCH2	X	X	X	X	A	A	C	A	A	A	A	A	A

Blagdon Pump - Chemical Resistance Chart

Chemical	Formula	Neoprene	Buna-n	EPDM	Hyrel	Viton	PTFE	Santoprene	Aluminum	Cast Iron	Stainless Steel	Polypropylene	PVDF	Nylon
Sucrose Solution (Sugar)	C12H22O11/H2O	A	A	A	A	A	A	A	A	A	A			
Sulfamic Acid	H2NSO3H	A	B		A	A	A		A 10%	X	X	X	X	
Sulfite Liquors		B	A	C	B	A	A	A						
Sulfur	S	B	X	A	A	A	A	A	A	A	A	A	A	A
Sulfur Chloride	S2Cl2	X	C	X	C	A	A	X	B	X	B	X	A	C
Sulfur Dioxide	SO2	A	X	B	X	A	A	A	A	B	A 10%	A	A	C
Sulfur Hexafluoride	SF6	A	B	A	A	A	A	B						
Sulfur Trioxide	SO3	C	C	C	X	A	A	C	B	B	B	X	X	A
Sulfuric Acid (Conc.)	H2SO4	X	X	C		A	A	B 98%	X	B	B	X	A 120°F	X
Sulfuric Acid (Fuming)	H2SO4	X	X	X	X 20%	B	A		C	X	B			
Sulfuric Acid 10%	H2SO4	A	B	A	A	A	A	A	X	X	A	A	A	X
Sulfuric Acid 25%	H2SO4	B	C	B	A	A	A	A	X	X	B	A	A 150°F	X
Sulfuric Acid 50%	H2SO4	B	C	B	A	A	A	A	X	X	X	A	A 150°F	X
Sulfuric Acid 60%	H2SO4	C	X	B	X	A	A	A	X	X	X	A	A 150°F	X
Sulfuric Acid 75%	H2SO4	X	X	C	X	A	A	A	X	C	C	A	A 150°F	X
Sulfuric Acid 95%	H2SO4	X	X	C	X	A	A	A	X	B	A	X	A 120°F	X
Sulfurous Acid	H2SO3	X	B	C	C	A	A	A	B	X	B	A	A	X
Tall Oil (Liquid Rosin)	Rosin acids	B	A	X		A	A	A	X	B 212°F	B	A	A	
Tallow	Fat from cattle, sheep		A			A	A	B	A		A	B		A
Tannic Acid	C76H52O46	B	C	C	A 10%	A	A	A	A	A	A	A	A	A
Tanning Liquors	Tannic acid	B	A			A	A	A	A		A	A		A
Tar, Bituminous (Coal tar, pitch)	Mixture of aromatic & phenolic hydrocarbo	C	B	X	X	A	A	B	A		A	A		C
Tartaric Acid	C4H6O6	A	B	B	B	A	A	A	A 20%	X	A	A	A	A
Terpenes	C10 hydrocarbons	X	C	X		A	A		A	X				
Terpineol (Terpilenol)	C10H18O	X	C	C		A	A	B	A	A	A	X	B 120°F	
Tertiary Butyl Alcohol	(CH3)3COH	A	A			B	A	B				B		
Tertiary Butyl Catechol	C9H14O2	B	X			A	A	B	C	B	B			
Tertiary Butyl Mercaptan	C4H10S	X	X			A	A	B						
Tetra Bromomethane	CBr4	X	X			A	A	X	X			X		
Tetrabutyl Titanate	Ti(C4H9)4	A	B	B		A	A	B	A					
Tetrachlorodifluoroethane	(Cl2FC)2	X	X			A	A		A					
Tetrachloroethane (Acetylene Tetrachloride)	(Cl2HC)2	X	X	X		A	A	X	X	A	C	X	A	C
Tetrachloroethylene	Cl2C = CCl2							X	A				A	
Tetraethyl Lead	Pb(C2H5)4	X	B	X		B	A	C	B	A	A	A	A	
Tetraethylene Glycol (TEG)	HOCH2(CH2OCH2)3CH2OH		A			A	A							
Tetrahydrofuran (THF)	C4H8O	X	X	C	C	X	A	B				C 100°F	B 70°F	A
Tetrahydronaphthalene (Tetralin)	C10H12	X	X	X		A	A		A	A	A	C		A
Thionyl Chloride	SOCl2	X	X	X		B	A	B	C	A	A	B	X	X
Thiophene	C4H4S	X	X	X		C	A							
Titanium Tetrachloride	TiCl4	X	C	X		A	A	X	X	A	B	B	B	A
Toluene (Toluol)	C7H8	X	C	X	C	B	A	C	A	A	A	X	A	A
Toluene Diisocyanate	CH3C6H3(NCO)2	X		A	B		A	B						
Toluidine	CH3C6H4NH2		X			B	A		A	A	A			
Tomato Pulp & Juice			A			A	A	A	B		A	A	A	A
Toothpaste		C	A			A	A			X	A			
Transformer Oil (Petroleum)	Hydrocarbons	C	B	X	B	A	A	X	A	A	A	B		A
Transmission Fluid (Type A)		C	A	X		A	A	C	A	A	A			
Triacetin	C3H5(OCOCH3)3	B	A	A		X	A	A	B					
Triallyl Phosphate	P(OC3H5)3	C	X	A		A	A					B	A	A
Triaryl Phosphate	(C6H5O)3PO	C	X			A	A							
Tributyl Phosphate (TBP)	(C4H9)3PO4	X	X	C	C	X	A	B	A	A	A	B 100°F	A 100°F	B
Tributyoxyl Ethyl Phosphate	(C4H9O)3P(C2H5)	X	X	A		B	A	B						
Trichloroacetic Acid (TCA)	CCl3COOH	B	C	C	X	B	A	B	X	X	X	B	B	X

Blagdon Pump - Chemical Resistance Chart

Chemical	Formula	Neoprene	Buna-n	EPDM	Hyrel	Viton	PTFE	Santoprene	Aluminum	Cast Iron	Stainless Steel	Polypropylene	PVDF	Nylon
Trichlorobenzenes	C6H3Cl3	X	X			B	A		X	A	A			
Trichloroethane	C2H3Cl3	X	X	X		B	A	X	X	A	A	X	A	X
Trichloroethylene (Ex-Tri) (Hi-Tri)	C2HCl3	X	X	X	X	C	A	X	X	B	A 90% 167°F	X	A	C
Trichloropropane	CH2ClCHClCH2Cl	A	X			B	A	X	X	A	A	X		
Tricresyl Alcohol (Tridecanol)	C12H25 CH2OH		A			B	A							
Tricresyl Phosphate (Lindol) (TCP)	(CH3C6H4O)3 PO	C	X	A	C	C	A	B		A	B	B	X	A
Triethanol Amine (TEA)	N(C2H4OH)3	A	X	B	X	C	A	A	A	A	A	A	X	A
Triethyl Aluminum (ATE)	Al(C2H5)3	X	X			B	A	B						
Triethyl Amine	(CH3CH2)3N	B	A				A			A	A	C	A 120°F	
Triethyl Borane	(C2H5)3B	X	X			A	A	B						
Triethylene Glycol (TEG)	(CH2OCH2CH2OH)2		A			A	A					A		A
Trimethylene Glycol	HO(CH2)3OH		A	A		A	A		A	A	A			
Trinitrotoluene (TNT)	CH3C6H2(NO2)3	B	X	X		C	A	A						
Trioctyl Phosphate	(C8H17O)3PO	X	X	A		B	A	B						
Tung Oil (Wood Oil)	Fatty acids	C	A	X	B	A	A	B	A		A	A		
Turpentine	C10H16	X	A	X	B	A	A	C	A	A	A	X	A	B
Unsymmetrical Dimethyl Hydrazine (UDMN)	H2NN(CH3)2	C	C	A		X	A	B					A	
Urea (Carbamide)	CO(NH2)2	B	B		B	A	A		B		B 50%	A	A	A
Urine		X	A			A	A	A	A	A	A	A	A	A
Valeric Acid	CH3(CH2)3COOH	X	X	A			A		A					
Vanilla Extract (Vanillin)	C6H3(CHO)(OCH3)(OH)	X	A			X	A				A			
Varnish (Oil, gum resins, oil of turpentine)		C	B	X		A	A		A		A	A	A	X
Vegetable Juices		C	A				A	A	C		A			
Vegetable Oils		C	B	A		A	A	B	A	B	A	X		A
Vinegar	Dilute acetic acid	B	C	A	C	A	A	A	C	X	A	A	A	X
Vinyl Acetate	CH3COOCHCH2	B	X			X	A		B	A	A	B	A	
Vinyl Chloride (Chloroethylene)	CH2CHCl	X	X	C		A	A	X	X	A	A	X	B	A
Walnut Oil		B	A			A	A							
Water, Distilled (Also Deionized)	H2O	C	A	A	A	A	A	A	A	C	A	A	A	A
Water, Fresh	H2O	B	A	A	A 72°	A	A	A	A	A	A	A	A	B
Waxes	Hydrocarbons	C	A	X			A		A		A			A
Weed Killers		C	B			A		B	X		A			
Whiskey	Ethanol, esters, acids	A	B	A	B	A	A	A	A	X	A	A	A	A
White Oil (Mineral, petroleum)	Mix of liquid hydrocarbons	C	A	X		A	A	C			A			
White Sulfate Liquor		A	B	A		B	A		B	C	A	A	A	
Wines		A	A	A	A	B	A	A	C	X	A	A	A	A
Wort, Distillery	Sugar solution from malt	A				A	A	A	A	B	A			
Xylene (Xylol)	C6H4(CH3)2	X	X	X	C	A	A	C	A	B	B	X	A	A
Xylidines (Xylidin)	(CH3)2C6H3NH2	X		X		X	A	C	B	B				
Zeolite (Hydrated alkali aluminum silicates)		C	C	A		A	A	A			A			
Zinc Acetate	Zn(C2H3O2)2	B	C	A		X	A	A	C			A	A	
Zinc Carbonate	ZnCO3		A			A	A		B	B	B			
Zinc Chloride	ZnCl2	B	B	A	A	A	A	A	A 10%	B	A 10%	A	A	C
Zinc Hydrosulfite	ZnHSO3	A	A			A	A	A	X		A			
Zinc Sulfate	ZnSO4	A	A	A	X	B	A	A	B 20%	X	B	A	A	B