



CHEMICAL COMPATIBILITY TABLE

made in Italy



Chemical compatibility table

NB

The information contained here in is only to be used with regard to the initial choice of pump construction materials.

We have obtained this information from reliable sources. FLUIMAC has not performed any form of testing in this regard and therefore accepts noliability for the therefore accepts noliability for the accuracy of the details provided.

Each application has its own specific set of parameters as regards stress, exposure time, chemical concentration and temperature.

FLUIMAC recommends practical testing of materials coming into contact with chemical substances.

NOTE REGARDING HALOGENATED SOLVENTS

In certain cases, the corrosive action of halogenated solvents coming into contact with aluminium or galvanised materials could cause an explosion.

To avoid any form of danger, when transferring halogenated solvents, the use of steel or PVDF pumps is recommended.

Summary of the plastic and rubber materials

CODE/TRADE NAME	MATERIAL	COMPOSITION	FLUIMAC CODE
NBR (PERBUNAN®)	Nitrile Rubber	Acrylonitrile-Butadiene	N
EPDM (DUTRAL®)	Ethylene Propylene Termopolimer	Ethylene Propylene Termopolimer	D
PVDF (KYNAR®)	PVDF	Polyvinylidene Fluoride	K
PP	Polypropylene	Polypropylene	P
PPS (RYTON®)	PPS	Polyphenylene Sulfide	R
PTFE (TEFLON®)	PTFE	Polytetrafluoroethylene	T
FPM (VITON®)	Fluorcarbor rubber	Fluoro-Elastomer	V
SANTOPRENE®	Thermoplastic Rubber	Thermoplastic Elastomer	M
HMWHDPE(POLIZENE®)	High Molecular Density Polyethylene	Ethylene polymer	Z
HYTREL®	Thermoplastic Rubber	Polyester elastomer	H

	ALLUMINIUM	AISI 316	NBR	PP	EPDM	PVDF	PPS	PTFE	FPM	SANTOPRENE	PE
Acetaldehyde	B	A	D	A1	A	D	A	A	D	-	B
Acetamide	A	A	A	A1	A	C	A	A	B	-	-
Acetate Solvent A	A	C	B1	A	A	A	A	D	-	-	-
Acetic Acid	B	B	C	B	A	C	A	A	B	C	B
Acetic Acid 20%	B	A	B	A	A	A	A	A	B	C	B
Acetic Acid 80%	B	B	C	A	A	C	A	A	B	C	B
Acetic Acid, Glacial	B	A	C	A1	B	A1	A	A	D	-	B
Acetic Anhydride	A1	A	D	B1	B	B1	A	A	D	D	D
Acetone	A	A	D	A	A	D	A	A	D	A1	A2
Acetonitrile											
Acetophenone	B	B	D	A	A	A	B	A	D	A	-
Acetyl Bromide	-	-	-	-	-	-	-	A	-	-	-
Acetyl Chloride (dry)	D	A	D	D	D	A2	A	A	A	A	-
Acetylene	A	A	B	A1	A	A	A	A	A	-	-
Acrylonitrile	B1	A1	D	A1	D	A1	-	A	D	D	-
Adipic Acid	A	A2	C	B2	A2	A2	-	A	A2	-	-
Alcohols: Amyl	B	A	B	B1	A	A	A	A	A	A	A
Alcohols: Butyl	B	A	C	A	A2	A	A	A	A	B	A
Alcohols: Benzyl	B	B	D	A	B	A	A	A	A	-	A
Alcohols: Diacetone	A1	A	D	B2	A	A1	-	A	D	-	-
Alcohols: Ethyl	B	A	C	A	A	-	-	A	A	-	-
Alcohols: Hexyl	A	A	A	-	C	-	-	A	C	-	-
Alcohols: Isobutyl	B	A	B	A1	A	-	-	A2	A	-	A
Alcohols: Isopropyl	B	B	B	A2	A	-	-	A2	A	-	A
Alcohols:Methyl	A1	A	A	A2	A	A	A	A	C	A	A
Alcohols:Octyl	A	A	B	-	A	-	-	-	B	-	-
Alcohols: Propyl	A	A	A	A	A	A2	A	A	A	A	A
Alkylene	-	-	D	-	D	-	-	A	A	D	-
Allyl	-	-	-	-	-	-	-	-	-	-	-
Allyl Chloride	-	-	-	-	-	-	-	-	-	-	-
Aluminum Acetate	A	B	C	-	A	-	A	A	D	A	-

Chemical Compatibility: A = Excellent B = Good C = Fair, not recommended D = Severe effect, not recommended

1. Good resistance up to 22°C (72°F) 2. Good resistance up to 48°C (120°F) - = Data not available

	ALLUMINIUM	AISI 316	NBR	PP	EPDM	PVDF	PPS	PTFE	FPM	SANTOPRENE	PE
Aluminum Chloride	D	B	A	A	A	A	A	A	A	-	A
Aluminum Chloride 20%	D	C1	A	A	A	A	A	A	A	-	-
Aluminum Fluoride	B1	D	A	A	A	A	A	A	A	-	A
Aluminum Hydroxide	B1	C1	A	A	A	A	-	A	A	-	-
Aluminum Nitrate	D	A	A2	A2	A2	A2	-	A	A2	-	-
Aluminum Phosphate	-	A	A	-	A	-	-	A	A	-	-
Aluminum Potassium Sulfate 10%	C	A	A	A	A	B	-	A	A	-	A
Aluminum Potassium Sulfate 100%	C	B2	A	A	A	-	-	A	A	-	A
Aluminum Sulfate	B1	B2	A	A	A	A	A	A	A	A	A
Alum-Nh3-Cr-K	-	-	A	-	A	-	-	A	D	A	-
Alums	A	A	A	A	A1	-	-	A	A	-	-
Amines	B	A	D	B2	B	-	B	A2	D	-	A
Ammonia 10%	A2	A	A	A2	A	A	A1	A	D	-	A
Ammonia Gas (Hot)	-	-	C	-	C	-	A	A	D	C	-
Ammonia Gas (Cold)	-	-	A	B	D	-	-	-	A	D	-
Ammonia Nitrate	C	A	C	A	A	A	A	A	D	-	-
Ammonia Water	-	-	-	-	-	-	-	-	-	-	-
Ammonia, anhydrous	A1	A2	B	A	A	A	A1	A	D	-	A
Ammonia, liquid	A	A2	C	A2	A	A	A1	A	D	-	-
Ammonium Acetate	A	A	B	A	A	-	-	A	A	-	-
Ammonium Bifluoride	B	B1	B	A	A2	A	-	A	A	-	-
Ammonium Carbonate	B	B	B	A	A	A	A	A	A	-	A
Ammonium Caseinate	-	A	-	-	-	-	-	-	-	-	-
Ammonium Chloride	B1	B2	B	A	A	A	A	A	A	-	A
Ammonium Fluoride	-	-	-	-	-	-	-	-	-	-	-
Ammonium Hydroxide	B2	A1	D	A	A	A	A	A	B	-	A
Ammonium Nitrate	B1	A	A	A	A	A	A	A	A	-	A
Ammonium Nitrite	-	-	A	A	A	-	-	A	-	A	-
Ammonium Oxalate	-	A	D	A	A	-	-	-	-	-	-
Ammonium Persulfate	D	B	A	A	B	A1	-	A1	A	-	A
Ammonium Phosphate, Dibasic	B1	C	A	A	A	A	A	A2	A	-	B

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	ALLUMINIUM	AISI 316	NBR	PP	EPDM	PVDF	PPS	PTFE	FPM	SANTOPRENE	PE
Ammonium Phosphate,	B	C	A	A	A	-	-	A	A	-	B
Ammonium Phosphate, Tribasic	B	B	A	A	A	-	-	A	A	-	B
Ammonium Sulfate	A1	B	A	A	A	A	A	A	A	-	A
Ammonium Sulfite	D	B	A1	A2	A1	-	-	A2	D	-	D
Ammonium Thisulfate	-	A	A	-	A1	-	-	-	-	-	-
Amyl Acetate	A	A	D	B1	A	A2	A	A	D	D	B
Amyl Alcohol	B	A	B	B1	A	A	A	A	A	A	A
Amyl Chloride	A1	A2	D	D	D	A	-	A	B1	-	-
Amyl-Alcohol	B	B	B	B	A	A	B	A	B	A	-
Amyl-Borate	-	-	A	-	D	-	-	A	A	D	-
Amyl-Chloronapthalene	-	-	B	-	D	-	-	A	A	D	-
Amyl-Napthalene	-	-	D	-	D	-	-	-	-	-	-
Aniline	C	B	D	A1	B	A1	A	A	A	A	B
Aniline Dyes	B	A	C	-	A	-	B	A	A	A	-
Aniline Hydrochloride	D	D	D	D	B	A2	-	A	A	-	-
Animal Fats	A	A	A	-	A	-	A	A	A	A	-
Ansul Ether	-	-	C	-	C	-	-	A	D	C	-
Antifreeze	A	A	A	D	A	-	-	-	A	A	-
Antymoni Trichloride	D	D	B	A	B1	A	-	A	A2	-	A
Aqua Regia (80% HCl, 20%HNO3)	D	D	D	B1	C	A2	D	A	B	-	B
Arochlor 1248	A	B	C1	D	B	-	-	A	A	-	-
Aromatic Hydrocarbons	A	C	D	D	-	-	-	A	A	-	-
Arsenic Acid	D	A2	A2	A	A2	A	A	A	A2	-	-
Arsenic Salts	-	-	-	-	-	-	-	-	A	-	-
Arsenic Trichloride	D	D	C	-	D	-	D	A	D	D	-
Askarel	-	-	B	-	D	-	-	A	A	D	-
Asphalt	A	A	B	B1	D	A	A	A1	A	-	-
Barium Carbonate	D	B	A2	A	A	A	A2	A	A	-	B
Barium Chloride	D	A1	A	A	A	A	A	A	A	-	B
Barium Cyanide	C1	A2	C	D	A	-	-	A1	A	-	-
Barium Hydroxide	D	B	A	B	A	A	A	A	A	-	-

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	ALLUMINIUM	AISI 316	NBR	PP	EPDM	PVDF	PPS	PTFE	FPM	SANTOPRENE	PE
Barium Nitrate	B	B	A2	A	A	-	-	A1	A	-	B
Barium Sulfate	B	B1	A	B1	A	A	A	A	A	-	A
Barium Sulfide	D	B2	A	B	A	A	-	A	A	-	A
Beer	A	A	A	A1	A	A	A2	A	A	-	A
Beet Sugar Liquids	A	A	A	A	A	-	A	A	A	A	-
Beet Sugar Liquors	A	A	A	-	A	A	A	A	A	A	-
Benzaldehyde	B	B	D	D	A	A2	A	A1	D	D	-
Benzene	B	B	D	D	D	A2	A	A	A	D	C1
Benzene Sulfonic Acid	D	B	D	D	D	-	A	A	A	-	-
Benzol	B1	A1	D	B	D	A	A	A	A	-	-
Benzonic Acid	B	B	D	B1	D	A	A1	A2	A	-	A
Benzonitrile	-	D	-	-	-	-	-	A2	-	-	-
Benzyl Benzoate	A	B	D	-	B	-	A	A	A	B	-
Benzyl Chloride	D	B1	D	C1	D	-	-	-	A2	-	-
Bibutyl Sebecate	-	A	D	B	B	A	-	A	B	B	-
Blast Furnace Gas	-	-	-	-	B	A	A	-	-	-	-
Bleaching Liquors	-	-	D	A1	D	-	-	A	A	-	-
Borax (Sodium Borate)	B1	A	B	B	A	A	A	A	A	-	A
Bordeaux Mixture	D	A	A	-	A	-	D	A	A	A	-
Boric Acid	D	A1	A	A	A	A	A	A	A	A	A
Brewery Slop	-	A	A	-	-	-	-	-	A	-	-
Brine	C	-	A	A	A	A	C	A	A	A	-
Brnzol, Alcohol	-	-	-	-	-	-	-	-	-	-	-
Bromide-Trifluoride	D	B	D	D	D	-	D	A	D	D	-
Bromine	D	D	D	D	D	A	D	A	A	-	D
Bromine-Anhydrous	D	D	-	D	C	-	D	A	A	C	-
Bromine-Vapor	-	-	-	-	-	-	-	-	-	-	-
Bromine-Water	D	B	-	D	-	A	D	A	A	-	-
Bromobenzene	D	B	D	D	D	A	D	A	B	D	-
Bunker Oil	A	A	A	-	D	-	A	A	A	D	-
Butadiene	A	A1	D	C	C	A	A1	A2	B	-	C

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	ALLUMINIUM	AISI 316	NBR	PP	EPDM	PVDF	PPS	PTFE	FPM	SANTOPRENE	PE
Butane	A	A2	A	A1	D	A	A	A	A	-	-
Butanol (Butyl Alcohol)	B	A1	A	A1	A2	A	A	A2	A	B	A
Butraldehyde	-	-	D	D	B	-	-	A	D	B	-
Butter	A	A	A	-	A	-	-	A	A	D	-
Buttermilk	A	A	A	A1	A1	-	-	A	A	-	-
Buttyl Phthalate	B2	B2	D	B2	B2	B1	A	A2	C1	-	A
Butyl Acetyl Ricinoleate	A	A	A	-	D	-	A	A	A	D	-
Butyl Acrylate	-	-	D	D	D	-	-	A	D	D	-
Butyl Alcohol	-	-	-	-	-	-	-	-	-	-	-
Butyl Amine	A2	A	-	B1	-	A1	D	A2	D	D	-
Butyl Benzoate	B	B	-	-	B	-	B	A	A	B	-
Butyl Carbitol	-	-	A	-	A	-	-	A	A	A	-
Butyl Cellosolve	-	-	B	-	A	A	-	A	C	A	-
Butyl Chloride	-	-	-	-	-	-	-	-	-	-	-
Butyl Ether	A1	A1	B2	D	D	A1	A2	A1	D	D	-
Butyl Oleate	-	-	-	-	B	-	-	A	A	B	-
Butyl Stearate	B	B	A	-	B	A	B	A	A	B	-
Butylacetate	A	A	AD	B1	B	B2	A	A	D	-	B
Butylene	A	A	A	-	D	A	A	A	A	D	-
Butyric Acid	B	B2	D	B1	B	A	A	A2	B1	D	B
Caffiene Citrate	-	-	-	-	-	-	-	-	-	-	-
Calcium Bisulfate	-	A	A	-	A	-	-	-	-	-	-
Calcium Bisulfide	C	B	A1	A	C	A	-	A	A	-	-
Calcium Bisulfite	D	A	A	A	D	A	A	A	A	-	A
Calcium Carbonate	D	B	A	A	A	A	-	A	A	-	-
Calcium Chlorate	-	-	A	-	A	A	-	A	A	-	-
Calcium Chloride	D	B2	A	A2	A	A	A	A	A	-	A
Calcium Hydroxide	C1	B	A	A2	A	A2	A	A	A	-	D
Calcium Hypochlorite	D	B1	C1	A1	B1	A	A	A	A	-	A1
Calcium Nitrate	B1	B2	A2	A2	A2	A2	A	A2	A2	-	-
Calcium Oxide	C	A	A	A	A	A	A	A	B	-	-

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	ALLUMINIUM	AISI 316	NBR	PP	EPDM	PVDF	PPS	PTFE	FPM	SANTOPRENE	PE
Calcium Sulfate	C	B	A2	A	A	A	A	A	A	-	-
Calcium Sulfide	A	B	A	A	A	-	A	A	A	A	-
Calgon	-	A	A	A	A	-	-	-	A	-	-
Cane Juice	B	A	A	C1	A	A1	-	A	A	-	-
Cane Sugar Liquors	A	A	A	A	A	A	A	A	A	A	-
Carbamate	-	-	C	-	B	-	-	A	A	B	-
Carbitol	B	B	B	C	B	-	B	A	A	B	-
Carbolic Acid (Phenol)	A	B	D	B	B	A1	A	A	A	D	B
Carbon Bisulfide	B	B	C	D	D	-	-	-	A	-	-
Carbon Dioxide (dry)	B1	A1	A	A2	B	A	A	A	B	-	C
Carbon Dioxide (wet)	A1	A1	A	A2	B	A	A	A	B	-	C
Carbon Disulfide	C	A	D	B	D	A	C	A	A	D	-
Carbon Monoxide	A	A	A	A	A	B	-	A	A	-	C
Carbon Tetrachloride	D	B	D	D	D	A2	A	A	A	-	D
Carbon Tetrachloride (dry)	D	B2	C1	D	B1	A2	A2	A	A2	D	D
Carbon Tetrachloride (wet)	D	A2	D	D	D	A2	A2	A	-	D	C
Carbonated Water	A	A	A	B	-	-	-	-	A	-	-
Carnobic Acid	B1	A	D	A	B	A	A	A	A	D	A
Catsup	D	A	A	A	A	-	-	-	A	-	-
Cellosolve	B	B	C	A	A	A	B	A	B	A	-
Cellosolve Acetate	-	-	C	-	A	A	-	A	A	A	-
Cellulube	-	-	D	-	A	-	-	A	A	A	-
Chloracetic Acid	D	C	D	B	B	A	D	A	D	B	-
Chloric Acid	D	C1	-	-	-	-	-	A	-	-	-
Chlorinated Glue	-	A	B	-	B	-	-	-	A	-	-
Chlorine (dry)	C1	B	B	D	A	A	D	A	A	D	B
Chlorine Dioxide	D	D	D	-	C	A	D	A	A	C	-
Chlorine Gas (Wet)	-	-	-	-	-	-	-	-	-	-	-
Chlorine Gas (Dry)	-	-	-	-	-	-	-	-	-	-	-
Chlorine Trifluoride	D	A	D	-	D	-	D	A	C	D	-
Chlorine Water	D	C	D	D	C	B	D	A	A	D	-

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	ALLUMINIUM	AISI 316	NBR	PP	EPDM	PVDF	PPS	PTFE	FPM	SANTOPRENE	PE
Chlorine(Wet)	D	D	D	D	D	A	D	A	A	D	-
Chlorine, Anhydrous Liquid	D	C	D	D	B	A1	D	A	A	-	-
Chloroacetic Acid	D	A1	D	C1	B	A1	A	A	D	D	D
Chloroacetone	D	B	D	D	D	-	D	A	B	D	-
Chlorobenzene (Mono)	A	B	D	C1	D	A1	A	B	A	D	B
Chlorobromometene	-	-	D	A	B	-	-	A	A	-	-
Chlorobutadiene	D	A	D	D	D	-	D	A	A	D	-
Chlorododecane	D	-	D	D	D	-	D	A	A	D	-
Chloroform	B1	A	D	C1	D	A	A	A1	A	D	D
Chloronapthalene	D	B	D	D	D	-	D	A	A	D	-
Chlorosulfonic Acid	C	B2	D	D	D	D	D	A	D	-	D
Chlorotoluene	D	B	D	D	D	-	D	A	A	D	-
Chocolate Syrup	A	A	A	A2	A	-	-	A	A	-	-
Chrome Plating Solutions	D	D	D	B	D	-	D	A	A	D	-
Chromic Acid 10%		B	D	D	C	A	A	A	B	-	A
Chromic Acid 30%		B2	D	D	B	A2	B	A	A	D	A
Chromic Acid 5%	C	A	D	D	A	A	A	A	A	-	A
Chromic Acid 50%	D	B2	D	D	B	A2	A1	A	A	D	A
Chromium Alum	-	-	-	-	-	-	-	-	-	-	-
Chromium Salts	-	-	-	-	-	-	-	-	-	-	-
Cider	B	A	A	A	A	-	-	-	A	-	-
Citric Acid	C	A2	A	A	A	A	A	A	A	A	A
Citric Oils	C	A	A	A	B	-	C	A	A	B	-
Clorox® (Bleach)	A	A	D	D	B	A	D	A	A	-	-
Cobalt Chloride(2n)	D	-	A	A	C	-	D	A	A	C	-
Coffee	A	A	A	A	A	-	-	-	A	-	-
Coke Oven Gas	-	-	C	-	D	A	-	A	A	D	-
Copper Acetate	D	C	B	-	A	-	D	A	-	A	-
Copper Chloride	-	D	A	A	A	A	A	A	A	-	-
Copper Cyanide	D	B	A	A	A	A	A	A	A	-	-
Copper Fluoborate	-	D	B	-	-	-	-	-	A	-	-

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	ALLUMINIUM	AISI 316	NBR	PP	EPDM	PVDF	PPS	PTFE	FPM	SANTOPRENE	PE
Copper Fluoride	-	-	-	-	-	-	-	-	-	-	-
Copper Nitrate	D	A2	A	A	-	A	A	A	A	-	-
Copper Sulfate >5%	D	B	A	A	A	A	A	A	A	-	A
Copper Sulfate 5%	D	B	A	A	A	A	A	A	A	-	A
Cream	A	A	A	A	-	-	-	A	A	-	-
Cresols	A	A	D	D	D	A2	A	-	A	-	-
Cresylic Acid	B2	A	D	A1	D	B1	-	A	A	-	-
Crude Oil	-	-	-	-	-	-	-	-	-	-	-
Cupric Acid	D	B2	B2	A2	A2	-	A	A	A2	-	-
Cyclohexane	A	A	B	D	D	A	A	A	A	D	A
Cyclohexanol	C	B	B	B	C	A	C	A	A	C	-
Cyclohexanone	A	A2	D	D	B	D	A	A	D	-	A
Cyniac Acid	-	A	C	-	-	-	-	A	A	-	-
Decane	-	-	B	A	C	-	-	A	A	C	-
Deklin	-	-	D	B	D	-	-	A	A	D	-
Denaturated Alcohol	A	A	A	A	A	-	A	A	B	A	-
Detergents	B	A1	A	A	A	A	A	A	A	-	A
Developing Fluids	-	B	A	-	A	-	-	A	A	A	-
Diacetone	A	A	D	D	A	A	A	A	D	A	-
Diacetone Alcohol	A1	B	D	A1	A	D	-	A	D	-	-
Dibenzyl Ether	B	B	D	-	C	-	B	A	C	C	-
Dibenzyl Sebecate	-	-	D	-	B	-	-	A	B	B	-
Dibutyl Amine	-	-	C	D	D	-	A	B	D	-	-
Dibutyl Ether	B	B	B	D	C	-	B	A	C	C	-
Dibutyl Phthalate	A	A	D	C	A	-	A	A	B	A	-
Dichloro Isopropyl Ether	D	-	D	D	C	-	D	A	C	C	-
Dichlorobenzene	-	-	-	-	-	-	-	-	-	-	-
Dichloroethane	B1	B	D	D	-	A	-	A1	C	D	D
Dichloroethylene	-	-	-	-	-	-	-	-	-	-	-
Diclorobenzene	B1	B1	D	C1	D	A	-	A	C	D	D
Dicyclohexylamine	-	-	D	-	D	-	-	A	B	D	-

Chemical Compatibility: A = Excellent B = Good C = Fair, not recommended D = Severe effect, not recommended

1. Good resistance up to 22°C (72°F) 2. Good resistance up to 48°C (120°F) - = Data not available

	ALLUMINIUM	AISI 316	NBR	PP	EPDM	PVDF	PPS	PTFE	FPM	SANTOPRENE	PE
Diesel Fuel	A1	A1	A	A1	D	A	A	A	A	D	D
Diethyl Benzene	-	-	D	-	D	-	-	A	A	D	-
Diethyl Ether	B	B	B	-	D	A	B	A	D	D	-
Diethyl Sebecate	A	A	D	A	B	-	A	A	A	B	-
Diethylamine	B	A	C	A1	B	D	-	D	A	-	-
Diethylene Glycol	B1	A	A2	A2	A2	A	-	A2	A2	-	-
Diisobutylene	B	B	B	-	-	-	B	A	A	-	-
Diisopropyl Benzene	-	-	D	-	D	-	-	A	A	D	-
Diisopropyl Ketone	-	-	D	-	A	A	-	A	D	A	-
Dimethyl Aniline	A	-	D	A	B	A	A	A	C	B	-
Dimethyl Formamide	A	A	C	A	-	A	A	A	A	-	-
Dimethyl Phthalate	-	B	D	A	B	A	-	A	C	B	-
Dinitrotoluene	-	-	D	-	D	-	-	A	B	D	-
Diocetyl Phthalate	A	A	D	-	B	A	A	A	A	B	-
Diocetyl Sebecate	-	-	D	-	B	-	-	A	B	B	-
Dioxane	B	A	D	C	A	A	B	A	D	A	-
Dioxolane	-	-	D	-	C	-	-	A	B	C	-
Dipentene	A	A	C	-	D	-	A	A	A	D	-
Diphenyl	B2	B	D	D	D	-	-	A	A2	-	-
Diphenyl Oxide	B1	A	A	D	D	B2	A	A1	A	-	-
Disodium Phosphate	-	-	-	-	-	-	-	-	-	-	-
Dowtherm Oil	C	A	-	-	D	A	C	A	A	D	-
Dry Cleaning Fluids	A	A	C	D	D	-	A	A	A	D	-
Dyes	B	A	-	-	-	-	-	-	A	-	-
Ehtyl Chloride	B	A	A	D	A	A	A	A	A	D	D
Epichlorohydrine	D	A	D	B	B	A	D	A	A	B	-
Epsom Salts (Magnesium)	B1	B	A	A	A	A	A	A	A	-	-
Etanol	B	A	C	A	A	-	-	A	A	A	A
Ethane	-	A1	A	D	D	A	-	A	A	-	-
Ethanolamine Ether	B	A	B	D	B	C1	A	A1	D	-	A
Ethyl Acetate	B1	A	D	D	C	B1	A	A	C	-	B

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1. Good resistance up to 22°C (72°F) 2. Good resistance up to 48°C (120°F) - = Data not available

	ALLUMINIUM	AISI 316	NBR	PP	EPDM	PVDF	PPS	PTFE	FPM	SANTOPRENE	PE
Ethyl Acetoacetate	A	-	D	-	B	A	A	A	A	B	-
Ethyl Alcohol Ethanol	-	-	-	-	-	-	-	-	-	-	-
Ethyl Benzene	A	B	D	D	D	-	A	A	A	D	-
Ethyl Benzoate	-	-	D	B1	-	D	-	A	A1	-	-
Ethyl Cellosolve	-	-	C	-	A	-	A	A	B	A	-
Ethyl Cellulose	B	B	B	-	B	-	B	A	A	B	-
Ethyl Chlorocarbonate	D	-	-	-	-	-	D	A	A	-	-
Ethyl Chloroformate	D	-	-	D	-	-	D	A	A	-	-
Ethyl Ether	B1	B	D	D	D	A2	A	A	D	-	D
Ethyl Formate	C	B	D	-	B	A	C	A	C	B	-
Ethyl Mercaptan	B	B	D	-	D	-	B	A	B	D	-
Ethyl Oxalate	A	-	D	-	A	-	A	A	B	A	-
Ethyl Pentochlorobenzene	D	-	D	D	D	-	D	A	A	D	-
Ethyl Silicate	B	A	A	-	A	-	B	A	A	A	-
Ethyl Sulfate	-	D	A	-	-	-	-	A	A	-	-
Ethylene	A	A	B	-	C	-	A	A	A	C	-
Ethylene Bromide	B	A	D	D	C	A	-	A	A	-	-
Ethylene Chloride	B	B	D	C1	D	A	A	A	B	-	B
Ethylene Chlorohydrin	B	B	D	D	B	A	-	A	A	D	-
Ethylene Diamine	B1	B	A	-	A	B	A	A	B	-	A
Ethylene Dichloride	A1	B	D	D	C	A	A	A	A	D	C
Ethylene Glycol	A	B	A	A	A	A	A	A	A	A	A
Ethylene Oxide	D	B	D	D	C	A	D	A	D	-	-
Ethylene Trichloride	D	A	D	D	D	-	D	A	A	D	-
Fatty Acids	A	A	B	A	D	A	-	A	A	D	-
Ferric Chloride	D	D	A	A	A	A	A	A	A	-	D
Ferric Nitrate	D	B	A	A	A	A	A	A	A	-	A
Ferric Sulfate	D	A	A	A	A	A	A	A	A	-	-
Ferrous Chloride	D	D	A	A	-	A	A	A	A	-	A
Ferrous Sulfate	B1	B	A2	A	A	A	A	A	B	-	-
Fish Oil	-	-	A	-	-	-	-	A	A	-	-

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1. Good resistance up to 22°C (72°F) 2. Good resistance up to 48°C (120°F) - = Data not available

	ALLUMINIUM	AISI 316	NBR	PP	EPDM	PVDF	PPS	PTFE	FPM	SANTOPRENE	PE
Fluoboric Acid	D	B	A	A	A2	A1	A	A	B	-	A
Fluorinate Cyclic Ethers	D	-	-	D	-	-	D	-	-	-	-
Fluorine	A	A	D	D	A1	A1	D	D	C	-	C
Fluoro Carbon Oils	D	-	-	D	A	-	D	A	A	A	D
Fluorobenzene	D	-	D	D	D	-	D	A	A	D	-
Fluorolube	-	-	C	-	A	-	-	A	A	A	-
Fluosilicic Acid	D	B	A	A	A2	A1	A	A	B1	-	A
Formaldehyde 100%	A	A	C	C	A	A	B	A	D	A	A
Formaldehyde 40%	B	A	B	A	A	A	A	A	A	A	-
Formic Acid	A	A1	C	A1	A	A	A	A	C	A	A
Freon® 11	D	A	B	A	D	A	A	A	B	-	-
Freon 113	-	-	A	D	D	B	A	A	B	-	-
Freon 12	B1	B	A	A2	B	A	A	A	B	-	-
Freon 218	D	-	A	-	A	-	D	A	A	A	-
Freon 22	D	A	D	B	A	A	A	A	D	A	A
Freon Bf	D	-	B	-	-	-	D	A	-	-	-
Freon Mf	D	-	A	-	-	-	D	A	-	-	-
Freon T P35	D	-	A	-	A	-	D	A	A	A	-
Freon T Wd602	D	-	B	-	B	-	D	A	A	B	-
Freon Ta	D	-	A	-	A	-	D	A	C	A	-
Freon Tc	D	-	A	-	B	-	D	A	A	B	-
Freon TF	D	A	A	D	D	B	D	A	B	D	-
Freon Tmc	D	-	B	-	B	-	D	A	A	B	-
Freon112	D	-	B	-	D	-	D	A	A	D	-
Freon114	D	-	A	D	C	A	D	A	A	C	-
Freon114b2	D	-	B	-	D	-	D	A	B	D	-
Freon115	D	-	A	-	A	-	D	A	B	A	-
Freon13	D	-	A	D	A	-	D	A	A	A	-
Freon13b1	D	-	A	-	A	-	D	A	A	A	-
Freon142b	D	-	A	-	A	-	D	A	D	A	-
Freon152a	D	-	A	-	A	-	D	A	D	A	-

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1. Good resistance up to 22°C (72°F) 2. Good resistance up to 48°C (120°F) - = Data not available

	ALLUMINIUM	AISI 316	NBR	PP	EPDM	PVDF	PPS	PTFE	FPM	SANTOPRENE	PE
Freon21	D	-	D	D	D	A	D	A	A	D	-
Freon31	D	-	D	-	A	-	D	A	D	A	-
Freon32	D	-	A	-	A	-	D	A	D	A	-
Freon502	D	-	B	-	-	-	D	A	B	-	-
Freonc316	D	-	A	-	A	-	D	A	A	A	-
Freonc318	D	-	A	-	A	-	D	A	A	A	-
Fruit Juice	A	A	A	B	-	A	-	A	A	-	-
Fuel Oils	C1	A	A	A	D	B	A	B	A	-	D
Fumaric Acid	-	-	C	-	-	-	-	A	A	-	-
Furan	-	-	D	C	D	-	-	A	C	D	-
Furan Resin	A	A	D	D	C	D	A	A	D	A	-
Furfural	A1	B	D	D	D	B2	A	A	D	-	A
Gallic Acid	D	B	B	A	B	A1	A	B	A	-	A
Gasoline (high-aromatic)	D	A	A	A	D	A	A	B	A	-	C
Gasoline, leaded, ref.	A	A2	A2	B	D	A	A	A	A1	-	C
Gasoline, unleaded	A2	A2	A1	C1	D	A	A	A	A1	-	C
Gelatin	A	A2	A	A	A	A	-	A	A	-	A
Glucose	A	A	A	A	A	A	B	A	A	-	A
Glue, P.V.A.	A	A2	A2	-	A	-	-	A	B	-	A
Glycerin	A	A	A	A	A	A	A	A	A	D	A
Glycolic Acid	-	A	A	A	A	B	A	A	A	-	-
Glycols	B	B	A	A	A	A	B	A	A	A	-
Gold Monocyanide	-	A	A	-	-	A	-	D	A	-	-
Grape Juice	-	A	A	-	A	A	-	A	A	-	-
Grease	-	A	A	-	D	A	-	A	A	D	-
Green Sulfate Liquor	-	-	A	A	A	-	-	A	A	A	-
Halowax Oil	-	-	D	-	D	-	-	A	A	D	-
Heptane	A	A	A	C2	D	A	A	A	A	A	A
Hexane	A	A	A	B1	D	A	A	A	A	-	C
Honey	A	A	A	A	A	A	-	A	A	-	-
Hydraulic Oil (Petro)	A	A	A	D	D	A	D	A	A	D	A

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1. Good resistance up to 22°C (72°F) 2. Good resistance up to 48°C (120°F) - = Data not available

	ALLUMINIUM	AISI 316	NBR	PP	EPDM	PVDF	PPS	PTFE	FPM	SANTOPRENE	PE
Hydraulic Oil (Synthetic)	A	A	D	D	A	A	-	A	A	-	-
Hydraulic Oils (Petroleum)	A	A	A	D	C	A	A	A	A	C	C
Hydraulic Oils(Synthetic)	A	A	C	D	-	A	A	-	A	-	A
Hydrazine	-	A	B	C	A	A	-	A	A	-	-
Hydrobromic Acid 100%	D	D	D	C1	A	A	A1	A	A	-	A
Hydrobromic Acid 20%	D	D	D	A2	A	A	-	-	A	-	A
Hydrochloric Acid 10%	D	D	D	A	D	A	D	A	A	-	-
Hydrochloric Acid 38%	D	D	-	B	A	A	D	A	A	A	A
Hydrochloric Acid 37%	D	D	B	C	C	A	D	A	A	C	C
Hydrochloric Acid, Dry Gas	D	D	-	B	-	A	A	A	-	-	-
Hydrocyanic Acid	A	A	B	A	B	A	B	A	A	A	A
Hydrocyanic Acid (Gas 10%)	-	-	B	A	A	-	-	A	A	-	-
Hydrofluoric Acid 100%	D	B1	D	D	D	A	D	A	B	D	A1
Hydrofluoric Acid 20%	D	D	D	D	D	A	A	A	A	-	-
Hydrofluoric Acid 50%	D	D	D	D	D	A	A	A	B	-	-
Hydrofluoric Acid 75%	D	D	D	D	C	A	B	A	B	-	-
Hydrofluosilicic 20%	D	B1	A	A	A	A	A	A	A	-	-
Hydrofluosilicic Acid 100%	D	D	B	A	A	A1	A1	A	A	-	A
Hydrogen Gas	A	A	A	A	A	A	A	A	A	-	A
Hydrogen Peroxide 5%	-	-	-	-	-	-	-	-	-	-	-
Hydrogen Peroxide 10%	A	B	D	A	A	A	A	A	A	-	A
Hydrogen peroxide 100%	A	A2	D	B1	D	A1	C	A	A	-	-
Hydrogen Peroxide 30%	A	B	D	B1	B	A	A1	A	A	-	A
Hydrogen Peroxide 50%	A	A2	D	B1	B	A1	-	A	A	-	-
Hydrogen Sulfide (acqua)	B	A	D	A1	B	A	A	A	D	-	A
Hydrogen Sulfide (dry)	B	A	D	A1	B	A	A	A	D	-	A
Hydrogen Sulfide (Wet) (Cold)	D	A	C	A	A	-	D	A	A	A	A
Hydrogen Sulfide (Wet) (Hot)	D	A	D	A	A	-	D	A	B	A	A
Hydroquinone	B	B	D	A	D	-	-	A	B	-	-
Hydroxyacetic Acid 70%	-	-	A	-	A	A	-	A	A	-	-
Hypochlorous Acid	D	D	D	A	B	A	D	A	A	B	-

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1. Good resistance up to 22°C (72°F) 2. Good resistance up to 48°C (120°F) - = Data not available

	ALLUMINIUM	AISI 316	NBR	PP	EPDM	PVDF	PPS	PTFE	FPM	SANTOPRENE	PE
Ink	-	C	A	-	-	A	-	A	A	-	A
Iodine	A	D	B	C	B	A2	D	A	A	-	A
Iodine (in alcohol)	B	-	-	-	A	A	-	-	-	-	-
Iodine Pentafluoride	-	-	D	-	D	-	-	A	D	D	-
Iodoform	-	A	D	-	A	C	-	C	-	-	-
Isobutyl Alcohol	-	-	-	-	-	-	-	-	-	-	-
Isooctane	A1	A1	A2	A2	D	A2	A	A	A1	D	A2
Isophorone	A	A	D	-	C	-	A	A	D	C	-
Isopropyl Acetate	D	A	D	B1	B	D	-	A	D	-	C
Isopropyl Chloride	D	A	D	D	D	-	D	A	B	D	-
Isopropyl Ether	A	A	B	B	D	D	-	A1	D	-	A
Isotane	D	-	A	D	-	A	-	-	A	-	-
Jet Fuel (JP3, JP4, JP5)	A	A	A	A1	D	B	A	A	A	D	-
Kerosene	A	A	A	B	D	A	A	A	A	D	C
Ketones	B	A	D	C	A	C1	A	A	D	D	C
Lacquer Thinners	A	A	D	D	D	-	-	A	D	D	-
Lacquers	A	A	D	D	D	D	-	A	D	-	-
Lactic Acid	B	B1	A	B	A	B1	A	A	A	-	A
Lard	A	A	A	B1	D	A	-	A	A	A	A
Latex	A	A2	A	A2	A	A	-	A	A	-	-
Lead Acetate	D	B1	B	A1	A	A	A	A	D	-	A
Lead Nitrate	D	B1	A2	A2	A2	A2	A	A1	A2	-	A
Lead Sulfamate	C	C	B	A2	A	A	-	B	A	-	-
Ligroin	D	A	A	A2	D	A	-	A	A	-	-
Lime	A	A	A	-	A	A	-	A1	A	-	A
Lime Bleach	D	A	A	B	A	-	D	A	A	A	-
Lime Sulfur	-	A	D	A	C	A	-	A	A	C	-
Lindol	-	-	D	-	A	-	-	A	B	A	-
Linoleic Acid	A2	A	B1	B1	D	A2	-	A	B1	-	-
Liquefied Petroleum Gas	-	-	A	D	D	-	-	A	A	D	-
Lithium Chloride	D	A2	A2	A2	A1	A2	-	A	A1	-	D

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1. Good resistance up to 22°C (72°F) 2. Good resistance up to 48°C (120°F) - = Data not available

	ALLUMINIUM	AISI 316	NBR	PP	EPDM	PVDF	PPS	PTFE	FPM	SANTOPRENE	PE
Lithium Hydroxide	D	B	C	-	-	-	-	A	-	-	D
Lubricants	A2	A2	A	A1	D	A	A	A	A	-	A
Lubricating Oils (Petroleum)	A	A	A	B	D	A	A	A	A	D	-
Lye: Ca(OH) ₂ Calcium Hydroxide	C1	B	A	A2	A	A2	A	A	B1	-	-
Lye: KOH Potassium Hydroxide	D	A1	B1	A	A2	A	A	A	B	-	-
Lye: NaOH Sodium Hidroxide	D	B1	A1	A	B1	D	A	A	B1	A	A
Magnesium Bisulfate	D	A1	B	A2	-	-	-	A	-	-	-
Magnesium Carbonate	A	B	A2	A	A	A	-	A1	A	-	-
Magnesium Chloride	D	D	A2	A2	A	A	A1	A	A2	-	A
Magnesium Hydroxide	C1	A1	A	A	A	A	A	A	A	-	A
Magnesium Nitrate	B	B	A	A	A	A	A	A	A	-	A
Magnesium Oxide	B	A	A	-	-	-	-	A	C	-	-
Magnesium Sulfate (Epsom Salts)	B1	B	A	A	A	A	A	A	A	-	-
Maleic Acid	B1	B	D	A	D	A	B	A	A	-	A
Maleic Anhydride	A	A	D	D	D	A	-	A	A	-	-
Malic Acid	B1	A2	A	A1	D	A	-	A	A	-	-
Manganese Sulfate	B1	B2	A2	-	A2	A2	A2	A	A2	-	-
Mash	A	A	A	-	A	-	-	-	A	-	-
Mayonnaise	A	A	C	-	-	A	-	A	A	-	-
Mehtyl Butyl Ketone	-	A	D	D	A1	D	-	-	D	-	-
Melamine	-	D	C	A	A	-	-	A	A	-	-
Mercuric Chloride (dilute)	D	D	A	B	A1	A	A	A	A	-	A
Mercuric Cyanide	D	C	A	B	A1	A	A	B	A1	-	-
Mercurous Nitrate	D	A1	B1	A	A1	A	-	A	A1	-	-
Mercury	D	A	A	B	A	A	-	A	A	-	A
Mesityl Oxide	A	A	D	-	B	-	A	A	D	B	-
Methane	A	A	A	A	D	A	-	A	A	D	-
Methanol (Methyl Alcohol)	A1	A	A	A2	A	A	A	A	C	A	A
Methyl Acetate	A	B	D	D	B	B1	-	A	D	-	-
Methyl Acetate	A	A	D	-	A1	D	-	A	D	-	-
Methyl Acrylate	-	-	D	D	B	B1	-	-	D	-	-

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1. Good resistance up to 22°C (72°F) 2. Good resistance up to 48°C (120°F) - = Data not available

	ALLUMINIUM	AISI 316	NBR	PP	EPDM	PVDF	PPS	PTFE	FPM	SANTOPRENE	PE
Methyl Alcohol 10%	A1	A	A	A2	A	A	A	A	C	-	A
Methyl Bromide	D	A	B1	C	D	A	-	A	A	D	C
Methyl Cellosolve	B	B	A1	B	B2	A	-	A	D	A	-
Methyl Chloride	D	A	D	D	D	A	B	A	A1	D	-
Methyl Cyclopentane	-	-	B	-	D	-	-	A	A	D	-
Methyl Dichloride	-	-	D	D	D	D	-	-	A1	-	-
Methyl Ethyl Ketone	B	A	D	B	A2	D	A	A	D	D	A
Methyl Ethyl Ketone Peroxide	-	-	D	-	D	-	-	-	D	-	-
Methyl Formate	A	B	D	-	A	-	A	A	D	A	-
Methyl Isobutyl Ketone	B	B	D	A	B1	D	A	A	D	-	-
Methyl isopropyl Ketone	A	A	D	-	C1	-	-	A	D	-	-
Methyl Methacrylate	-	B	D	D	D	B1	-	-	D	-	-
Methyl Oleate	-	-	D	-	C	-	-	A	B	C	-
Methyl Salicylate	A	-	D	B	C	-	A	A	B	C	-
Methylacrylic Acid	-	-	-	-	B	-	-	A	B	B	-
Methylamine	A	A	B	A2	A1	C	-	A	D	-	-
Methylene Chloride	C	B	D	B1	C1	B1	A	A	B	D	B
Milk	A	A	A1	B	A	A2	-	A	A	-	A
Mineral Spirits	A	A	A	B	D	-	A	A	A	-	-
Molasses	A	A	A	B	A1	B1	-	A	A	-	A
Mono, Di, Tribasic	D	A	A	A	-	-	D	-	A	B	A
Monobromoro Benzene	-	-	-	-	-	-	D	-	-	D	-
Monochloroacetic acid	D	A1	D	-	C	B1	-	A2	C	D	D
Monochlorobenzene	D	A	D	D	D	A	-	A	A	D	-
Monoethanolamine	B	A	B1	B	B	C	A	A	D	-	-
Monomethyl Aniline	-	-	D	C	D	-	-	A	C	A	-
Monomethyl Ether	-	-	B	-	A	-	-	A	A	A	-
Monovynil Acetylene	-	-	A	-	A	-	B	A	A	A	-
Morpholine	A1	A1	D	B2	D	B1	C	A2	-	-	-
Motor Oil	A1	A2	A	A1	D	B	A	A	-	-	-
Mustard	B	A	B	A	A	A	-	A	D	A	-

Chemical Compatibility: A = Excellent B = Good C = Fair, not recommended D = Severe effect, not recommended

1. Good resistance up to 22°C (72°F) 2. Good resistance up to 48°C (120°F) - = Data not available

	ALLUMINIUM	AISI 316	NBR	PP	EPDM	PVDF	PPS	PTFE	FPM	SANTOPRENE	PE
N Hexaldehyde	A	A	D	-	B	-	A	A	C	B	-
N Hexene 1	-	-	A	-	D	-	-	A	A	D	-
N Octane	-	-	D	D	D	-	D	A	A	D	-
Naphtha	A	A	A	B	D	A	A	B	A	D	C
Naphthalene	B1	A	D	B	D	A2	A	A	A	D	A
Napthenic Acid	B	A	B	-	D	-	A	A	A	D	-
Natural Gas	A	A	A	A	D	-	-	A	A	D	-
Neatsfoot Oil	A	A	A	-	B	-	-	A	A	B	-
Neville Acid	-	-	C	-	B	-	D	A	A	B	-
Nickel Acetate	D	-	B	-	A	A	-	A	A	A	-
Nickel Chloride	D	C	A1	A	A1	A	A	A	A	-	A
Nickel Nitrate	D	B2	A1	A2	A2	A2	-	A2	A2	-	A
Nickel Sulfate	D	B1	A1	A	A1	A	A	A	A	-	A
Niter Cake	-	-	A	-	A	-	A	A	A	A	-
Nitrating Acid (<1% Acid)	D	A	-	C	-	-	C	A	-	D	-
Nitrating acid (<15% H2SO4)	D	C	-	C	-	-	C	A	-	D	-
Nitrating Acid (<15% HNO3)	D	D	-	C	-	-	C	A	-	D	-
Nitrating Acid (>15% H2SO4)	D	C	D	C	A1	-	D	A	-	D	-
Nitric Acid (20%)	D	A	D	A2	A1	A	C	A	A	D	D
Nitric Acid (50%)	D	A1	D	B	D	A1	C	A	A	D	D
Nitric Acid (5-10%)	A	A	D	A	A1	A1	B1	A	A	-	A
Nitric Acid (Concentrated)	D	A1	D	D	D	A1	C	A	A	D	D
Nitric Acid Red Fuming	A	A	D	D	D	-	-	A	B	D	-
Nitro Ethane	A	A	D	C	B	-	A	A	C	B	-
Nitrobenzene	B	B	D	B1	B1	A1	A2	A	B	-	A
Nitrobenzine	-	-	-	-	C	-	A	A	A	C	-
Nitrogen Fertilizer	-	-	-	-	-	-	-	A	-	-	-
Nitrogen Tetroxide	D	-	D	D	C	-	-	A	C	C	-
Nitrogen(Gas)	A	A	A	A	A	A	D	A	A	A	-
Nitromethane	A	A1	D	B2	B2	A2	A2	A	D	-	-
Nitrous Acid	D	B	-	A	A	B	-	A	B	-	-

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1. Good resistance up to 22°C (72°F) 2. Good resistance up to 48°C (120°F) - = Data not available

	ALLUMINIUM	AISI 316	NBR	PP	EPDM	PVDF	PPS	PTFE	FPM	SANTOPRENE	PE
Nitrous Oxide	B	B	-	D	A	D	-	A	B	-	-
O Dichloro Benzene	A	-	D	D	-	-	A	-	A	A	-
Octachloratoluene	D	-	D	D	D	-	A	A	A	D	-
Octadecane	-	-	-	-	D	-	-	A	A	D	-
Octane	-	-	-	-	-	-	-	-	-	-	-
Oils: Aniline	D	A	D	A	B	A	-	A	C	-	-
Oils: Anise	-	A	-	-	-	-	-	-	-	-	-
Oils: Bay	-	A	-	-	-	A	-	-	A	-	-
Oils: Bone	-	A	A	A	-	A	-	A	A	-	-
Oils: Castor	A	A	B	A	B	A	-	A	A	D	-
Oils: Cinnamon	-	A	-	D	-	-	-	A	A	-	-
Oils: Clove	B	A	A	-	-	-	-	A	A	-	-
Oils: Coconut	A	A	A	A1	D	A	-	A	A	-	-
Oils: Cod Liver	A	A	A	A1	A	A	-	A	A	-	-
Oils: Corn	A	A	D	A2	C	A	-	A	B	A	-
Oils: Cottonseed	A	A	A	A	D	A	A	A	A	-	B
Oils: Creosote	B	B	D	C	D	-	-	A	A	-	A
Oils: Diesel Fuel (20, 30, 40, 50)	A	A	A	A1	D	A	A	A	A	D	D
Oils: Fuel (1, 2, 3, 5A, 5B, 6)	C1	A	B	B	D	B	A	A	B	-	D
Oils: Ginger	-	D	A	-	A	A	-	A	A	-	-
Oils: Hydraulic Oil (Petro)	A	A	A	D	D	A	D	A	A	D	A
Oils: Hydraulic Oil (Synthetic)	A	A	D	D	A	A	-	A	A	-	-
Oils: Lemon	A	A	-	-	D	A	-	A	A	-	-
Oils: Linseed	B	A	A	A	D	A	B	A	A	-	A
Oils: Mineral	A	A	A	A	D	A	A	A	A	D	C
Oils: Olive	A	A	D	A	D	-	-	A1	A	-	-
Oils: Orange	A	A	A	A	-	A	-	-	A	-	-
Oils: Palm	-	A	A	-	A	A	-	A	A	-	-
Oils: Peanut	A	A	A	D	D	A	-	A	A	-	-
Oils: Peppermint	D	A	D	-	-	A	-	A	A	-	-
Oils: Pine	A	A	D	B	D	A	-	A	A	-	-

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1. Good resistance up to 22°C (72°F) 2. Good resistance up to 48°C (120°F) - = Data not available

	ALLUMINIUM	AISI 316	NBR	PP	EPDM	PVDF	PPS	PTFE	FPM	SANTOPRENE	PE
Oils: Rapeseed	-	A	D	D	A	A	-	A	A	-	-
Oils: Rosin	B1	A1	A	A2	-	A	-	A	A	-	A
Oils: sesame Seed	-	A	A	A	-	A	-	A	A	-	-
Oils: Silicone	A	A	A	A	A	A	A1	A	A	-	-
Oils: Soybean	A	A	A	A1	C	A	-	A	A	-	-
Oils: Sperm (whale)	-	A	A	-	-	A	-	A	A	-	-
Oils: Tanning	-	A	A	-	-	A	-	-	A	-	-
Oils: Tranformer	A	A	A	B	D	A	-	A	A	-	A
Oils: Turbine	A	A	B	B1	A	A	-	A	A	-	-
Oleic Acid	A	A	B	B1	B	A	A	A	B	-	A
Oleum 100%	B	A	D	D	D	D	A1	A	A	-	-
Oleum 25%	B	B	D	D	D	C1	A1	A	A	-	-
Oleum Spirits	D	B	D	D	C	-	A	A	A	C	D
Oxalic Acid (cold)	A	A	D	A2	A	B	A	A1	A	A	A
Oxgen Cold	A	A	C	C	B	A	A	A	A	B	-
Oxygen 200 400 F	A	A	D	D	D	-	A	A	B	D	-
Ozone	B	A	D	B	A	A	-	A	A	-	B
Paint Thinner, Duco	A	A	A	D	D	-	-	A	B	D	-
Palmitic Acid	B	A1	A2	B1	B1	A2	-	A2	A1	A	-
Paraffin	A	A	B	A1	D	A	-	A	B	-	A
Pechloric Acid	D	C	D	C	B	A	-	A	A	-	C
Pentane	B	C	A	D	D	A	-	A	A	-	-
Perchloric Acid 10%	-	-	-	-	-	-	-	-	-	-	-
Perchloric Acid 70%	-	-	-	-	-	-	-	-	-	-	-
Perchloroethylene	C	A1	C	D	D	A	A	A	A	D	B
Petrolatum	-	A	A	D	A	A	-	C	A	-	-
Petroleum	D	A1	A2	B1	D	A	-	A2	A2	C	C
Petroleum Above 250	A	A	C	-	D	-	A	A	B	D	C
Petroleum Below 250	A	A	A	A	D	A	A	A	A	D	C
Phenil (Carbolic Acid)	A	B	D	B	B	A1	A	A	A	-	B
Phenol (10%)	A	B	D	B1	B	A	A	A	A	-	-

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1. Good resistance up to 22°C (72°F) 2. Good resistance up to 48°C (120°F) - = Data not available

	ALLUMINIUM	AISI 316	NBR	PP	EPDM	PVDF	PPS	PTFE	FPM	SANTOPRENE	PE
Phenol (Carbolic Acid)	B	A	D	C	C	A	B	A	A	C	D
Phenyl Ethyl Ether	-	-	D	D	D	D	-	A	C	D	-
Phenyl Hydrazine	-	-	D	D	C	C	-	A	A	C	-
Phenylbenzene	-	-	D	-	D	-	-	A	A	D	-
Phorone	-	-	D	D	C	C	-	A	A	C	-
Phosphoric Acid 20%	C	A	D	A2	B	A	A	A	A	-	-
Phosphoric Acid 40%	C	B	D	A2	B	A	A	A	A	-	B
Phosphoric Acid 40% - 100%	C	B	D	A2	B	A	A	A	A	-	A2
Phosphoric Acid (crude)	C	B	D	B2	B	A	A	A	A	-	-
Potassium Chromate	B1	B1	A1	A	A2	B	-	A1	A	-	-
Potassium Cupro Cyanide	-	-	A	-	A	-	-	A	A	A	-
Potassium Cyanide Solutions	D	B1	A1	A	A1	A	A	A	A	-	-
Potassium Dichromate	B	B1	A1	A	A1	A	A	A	A	-	A
Potassium Ferricyanide	B2	B1	D	A2	A	A2	-	A2	A	-	-
Potassium Ferrocynaide	B1	B	D	A	A	A	-	A	A	-	-
Potassium Hydroxide (Caustic Potash)	D	A1	B1	A	A2	A	A	A	B	-	A
Potassium Hypochlorite	D	B	A1	-	A1	A1	A	A2	-	-	-
Potassium Iodide	B1	A1	A1	A2	A	A2	A2	A2	A	-	B
Potassium Nitrate	B	B	A2	A	A	A	A	A	A	-	A
Potassium Oxalate	B1	B1	-	-	-	-	-	A2	-	-	-
Potassium Permanganate	B1	B	C	A1	A	A	A	A	A	-	A
Potassium Sulfate	C	A	A2	A	A1	A	A	A	A2	-	A
Potassium Sulfide	D	B	A	A	A	A	A	A	A	-	-
Producer Gas	-	-	A	-	C	-	-	A	A	C	-
Propane (liquefied)	A	A	A	A	D	A	-	A	A	-	A
Propyl Acetate	-	-	D	C	C	A	-	A	D	C	-
Propyl Alcohol	-	-	-	-	-	-	-	-	-	-	-
Propyl Nitrate	A	-	-	-	B	-	A	A	C	B	-
Propylene	A	A1	D	-	D	-	-	A2	A1	-	-
Propylene Glycol	B	B	A	A2	A	-	-	A	A	-	B
Propylene Oxide	B	A	-	C	B	D	B	A	-	B	-

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1. Good resistance up to 22°C (72°F) 2. Good resistance up to 48°C (120°F) - = Data not available

	ALLUMINIUM	AISI 316	NBR	PP	EPDM	PVDF	PPS	PTFE	FPM	SANTOPRENE	PE
Pydrauls	-	-	D	-	B	A	-	A	A	B	-
Pyranol	-	-	A	-	D	-	-	A	A	D	-
Pyridine	B	A	D	A2	B	D	A	A	D	A	A
Pyrogallic Acid	B	B	-	A	B	A	-	A	A	-	-
Pyroligneous Acid	D	B	C	-	B	A	D	A	A	B	-
Pyrrole	-	-	D	-	C	-	-	A	C	C	-
Radiation	-	-	B	-	C	-	-	A	B	C	-
Red Oil	-	-	A	-	B	-	-	A	A	B	-
Resorcinal	-	-	-	A2	B1	-	-	A2	A1	D	-
Rosins	B1	A1	A2	A2	-	-	-	A	A	-	A
Rum	-	A	A	A	A	-	-	-	A	-	-
Rust Inhibitors	-	A	A	A	-	-	-	-	A	-	-
Sal Ammoniac	D	A	A	-	A	-	D	A	A	A	-
Salad Dressings	B	A	A	A	-	-	-	-	A	-	-
Salicyaldehyde	-	-	-	-	-	-	-	-	-	-	-
Salicylic Acid	B2	B2	B	A1	A	A	-	A2	A1	-	-
Salt Brine (NaCl saturated)	B1	A2	A	A	A	A	A	A2	A2	-	A
Sea Water	B	C	A2	A	A2	A	A	A	A	A	A
Sewage	B	A	A	A	B	-	B	A	A	B	-
Shellac (Bleached)	A	A	A2	A	A2	-	-	A	A	-	-
Shellac (Orange)	A	A	A	A	A	-	-	A	A	-	-
Silicate Esters	-	-	A	-	D	-	-	A	A	D	-
Silicone	A	A	A	A	A	A	A1	A	A	-	-
Silicone Greases	-	-	A	-	A	-	-	A	A	A	-
Silver Bromide	D	D	-	-	-	-	-	A	-	-	-
Silver Chloride	-	-	-	-	-	-	-	-	-	-	-
Silver Cyanide	-	-	-	-	-	-	-	-	-	-	-
Silver Nitrate	D	B	B	A1	A	A	A	A	A	-	A
Skydrol 500	-	-	D	-	A	A	-	A	C	A	-
Skydrol 7000	-	-	D	-	C	A	-	A	B	C	-
Soap Solutions	C	A1	A	A	A	A1	A	A	A	A	A

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1. Good resistance up to 22°C (72°F) 2. Good resistance up to 48°C (120°F) - = Data not available

	ALLUMINIUM	AISI 316	NBR	PP	EPDM	PVDF	PPS	PTFE	FPM	SANTOPRENE	PE
Soda Ash (see Sodium Carbonate)	D	A	A1	A	A2	A	A	A	A	-	A
Sodium Acetate	B	B1	B	A	A	A	A	A	D	-	A
Sodium Aluminate	-	A	A	-	A	-	A	A	A	-	-
Sodium Benzoate	A1	-	B	A2	A	A2	-	A2	A1	-	A
Sodium Bicarbonate	D	A1	A1	A	A2	A	A	A	A	-	A
Sodium Bichromate	-	-	-	-	-	-	-	-	-	-	-
Sodium Bisulfate	D	C	B2	A	A2	A	A	A	A	-	A
Sodium Bisulfite	D	B1	A2	A	A2	A	A	A	A	-	A
Sodium Borate	C	B	A	A	A	A	C	A	A	A	A
Sodium Borate (Borax)	C	B	A1	A2	A	A	A	A	A	-	A
Sodium Bromide	D	C	-	-	A	A2	-	A2	A1	-	-
Sodium Carbonate	D	A	A	A	A2	A	A	A	A	-	-
Sodium Chlorate	B	A	A	A	A	A	B	A	A	A	B
Sodium Chloride	C	C	A	A	A	A	C	A	A	A	A
Sodium Chromate	D	-	A	A	-	-	D	A	A	A	-
Sodium Cyanide	D	B1	A	A	A2	A	A	A	A2	-	A
Sodium Dichromate	-	-	-	-	-	-	-	-	-	A	-
Sodium Ferrocyanide	A	B	A	A	A	A	-	A	A	-	-
Sodium Fluoride	B	D	A1	A	A	A	-	A1	A	-	-
Sodium Hydrosulfite	A	-	C	-	B	-	-	A	A	-	-
Sodium Hydroxide (20%)	D	B2	A	A	B	A	A	A	C	-	A
Sodium Hydroxide (50%)	D	B1	A1	A	B1	A	A	A	D	-	A
Sodium Hydroxide (80%)	D	B1	D	A	B1	A	A	A1	D	-	A
Sodium Hypochlorite (<20%)	D	C	B	C	B	A	A	A	A1	-	A
Sodium Hypochlorite (100%)	D	D	D	C	B1	A	A	A	A1	-	A
Sodium Hyposulfate	D	A	-	-	-	-	-	A	-	-	-
Sodium Metaphosphate	C	A	A	A1	A	A	-	A	A	-	A
Sodium Metasilicate	D	A	A	A	A1	-	-	A	A	-	-
Sodium Nitrate	B	B1	A1	A	A	A	A	A	A	-	A
Sodium Nitrite	-	-	-	-	-	-	-	-	-	-	-
Sodium Perborate	C	B	B	A	A	-	-	A	A	-	A

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1. Good resistance up to 22°C (72°F) 2. Good resistance up to 48°C (120°F) - = Data not available

	ALLUMINIUM	AISI 316	NBR	PP	EPDM	PVDF	PPS	PTFE	FPM	SANTOPRENE	PE
Sodium Peroxide	C	A	B	B	A	A	-	A	A	-	A
Sodium Polyphosphate	D	B	A	A	A	A	-	A	A	-	A
Sodium Silicate	A	B	A	A	A	A	A	A	A	-	A
Sodium Sulfate	A	B1	A	A	A	A	A	A	A	-	A
Sodium Sulfide	D	D	A	A	A2	A	A	A	A2	-	A
Sodium Sulfite	C1	A	A	A2	A	A	-	A	A2	-	A
Sodium Tetraborate	C	A	A	-	A	-	-	A	A	-	A
Sodium Thiosulfate	A	B	B	A2	A2	A	A	A	A	-	A
Sorghum	-	A	A	-	-	-	-	-	A	-	-
Soy Sauce	A	A	A	-	-	-	-	-	A	-	-
Stannic Chloride	D	D	A	A	A	A	A	A	A	-	-
Stannic Fluoborate	-	A	A	-	-	-	-	-	A	-	-
Stannic Fluoroborate	D	-	A	-	-	-	D	-	A	D	-
Stannous Chloride	D	A2	A	A	C	A	A1	A	A	-	-
Starch	A	A	A	A2	A	-	-	A	A	-	-
Steam 220 300 F	A	A	D	-	A	A	A	D	D	A	-
Stearic Acid	B	A	B	A2	B	A	-	A	A1	A	-
Stoddard Solvent	A	A	A	C	D	A	A	A	A	D	-
Styrene	A	A	D	-	D	-	-	A	B	-	-
Sucrose Solutions	-	-	A	-	A	-	-	A	A	C	-
Sugar (Liquids)	A	A	A	A	A	-	-	A	A	-	-
Sulfate (Liquors)	D	B	A2	A	A	A	-	A	A1	-	A
Sulfite Liquors	D	B	A	-	B	A	D	A	A	-	-
Sulfur	D	A	B	A	A	A	D	A	A	-	-
Sulfur Chloride	D	D	D	C	D	A	D	A	A	A	C
Sulfur Dioxide	D	A	D	A	A	A	D	A	D	A	B
Sulfur Dioxide (dry)	B	A	D	A1	A2	A	A	A	A	-	A
Sulfur Hexafluoride	D	-	B	-	A	-	D	A	A	A	B
Sulfur Trioxide	D	B	C	-	C	-	D	A	A	-	C
Sulfur Trioxide Dry	A	C	D	D	C	-	A	A	A	C	-
Sulfuric Acid (<10%)	D	B	A1	A2	A	A	A	A	A	-	D

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1. Good resistance up to 22°C (72°F) 2. Good resistance up to 48°C (120°F) - = Data not available

	ALLUMINIUM	AISI 316	NBR	PP	EPDM	PVDF	PPS	PTFE	FPM	SANTOPRENE	PE
Sulfuric Acid (10-50%)	D	D	B1	B1	B2	A	A	A	A2	A	D
Sulfuric Acid 75-100%)	D	D	C	C1	B1	A	A1	A	A1	C	D
Sulfuril Chloride	-	-	-	-	-	-	-	A	-	-	-
Sulfurous Acid	B1	B	B1	A	B	A	A	A	A	-	D
Syrup	A	A	A	A	-	-	A	-	A	-	-
Tall Oil	-	-	-	-	-	-	-	-	-	-	-
Tallow	A	A	A	A2	A	-	-	A	A	-	A
Tannic Acid	C	A	A	A	A	B	A	A	A	A	A
Tanning Liquors	A	A2	B1	A1	B	-	-	A	A	-	-
Tar, Bituminous	-	B	B	D	D	A	-	A	A	D	-
Tartaric Acid	B1	C2	A	A	B	B	A	A	A	A	A
Terpineol	A	A	C	B	B	-	A	A	A	B	-
Tertiary Butyl Alcohol	-	-	A	B	A	-	-	A	B	A	-
Tertiary Butyl Catechol	C	A	D	B	B	-	C	A	A	B	-
Tertiary Butyl Mercaptan	-	-	D	D	D	-	-	A	A	D	C
Tetra Bromo Methane	D	-	D	D	D	-	D	A	A	D	-
Tetra Butyl Titanate	-	-	B	B	B	-	-	A	A	B	-
Tetrachloroethane	C	A	D	C	D	A	-	A	A	D	-
Tetrachloroethylene	-	A	D	D	D	-	-	A	A	-	B
Tetraethyl Lead	-	-	B	A	D	-	-	A	A	D	-
Tetrahydrofuran	-	A	D	C2	D	B1	A	A	D	D	B
Tetralin	A	A	D	D	D	-	A	A	A	D	-
Thionyl Chloride	D	-	D	D	D	A	D	A	A	D	-
Tin Salts	D	D	A	A	B	A	-	A	A	-	-
Titanium Tetrachloride	D	B	C	D	D	-	D	A	A	D	-
Toluene (Toluol)	A	A	D	C	D	A	A	A	C	D	C
Toluene Diisocyanate	-	-	-	-	A	-	-	A	-	A	-
Tomato Juice	A	A	A	A	A	A	A	A	A	-	A
Transformer Oil	A	A	B	B	D	A	A	A	A	D	-
Transmission Fluid Type A	A	A	A	-	D	-	A	A	A	A	-
Triacetin	B	-	A	-	A	-	B	A	C	A	-

Chemical Compatibility: A = Excellent B = Good C = Fair, not recommended D = Severe effect, not recommended

1. Good resistance up to 22°C (72°F) 2. Good resistance up to 48°C (120°F) - = Data not available

	ALLUMINIUM	AISI 316	NBR	PP	EPDM	PVDF	PPS	PTFE	FPM	SANTOPRENE	PE
Triaryl Phosphate	D	D	-	A	-	-	A	A	A	-	-
Tributoxy Ethyl Phosphate	-	-	D	-	A	-	-	A	B	A	-
Tributyl Mercaptan	-	-	D	-	D	-	-	A	A	D	-
Trichloroacetic Acid	D	C	-	A	B	B	A	A	C	-	-
Trichloroethane	D	B	D	C	D	A	-	A	A	D	-
Trichloroethylene	D	B	D	C1	D	B	A1	A	A	D	C1
Trichloropropane	D	A	D	-	-	-	-	A1	A	-	-
Tricresylphosphate	D	B	D	A1	A	D	-	A	A2	-	-
Triethanol Amine	B	A	B	A	B	A	B	A	B	B	-
Triethyl Aluminum	-	D	D	-	-	-	-	A	B	-	-
Triethyl Borane	-	D	D	-	-	-	-	A	A	-	-
Triethylamine	-	A	C	D	A	A2	-	A	D	-	-
Trinitrotoluene	-	D	D	-	D	-	-	A	C	D	-
Trioctyl Phosphate	-	D	D	-	A	-	-	A	B	A	-
Trisodium Phosphate	D	B	A	A	A	A	A	A	A	-	A
Tung Oil	A	A	A	-	C	-	A	A	B	C	-
Turpentine	A	A	-	D	D	A	A	A	A	D	D
Unleaded Gasoline	A	D	A	D	D	-	A	A	A	D	-
Urea	B	B	B	A	A	A	A	A	A	-	A
Uric Acid	D	B	-	-	-	-	-	A	-	A	-
Urine	B	A	A1	A	A1	A	-	A1	A1	-	A
Varnish	A	A	B	A	D	-	-	A	A	-	A
Vegetable Juice	D	A	A2	-	A	-	-	A	A	-	-
Vinegar	D	A	B	A	A	B	A	A	A	-	A
Vinyl Acetate	A1	B	D	B1	B2	A2	-	A2	A1	-	D
Vinyl Chloride	B1	A1	D	-	C	B1	-	A2	A1	-	-
Water, Acid, Mine	D	B	A	A	A	A	A	A	A	-	-
Water, Delonized	A2	A2	A1	A2	A1	A2	A	A2	A1	-	-
Water, demineralized, Distilled	A	A	A	A	A	A	A	A	A	A	-
Water, Fresh	B	A	A	A	A	A	A	A	A	A	A
Water, Salt	B	B	A	A	A	A	A	A	A	A	A

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1. Good resistance up to 22°C (72°F) 2. Good resistance up to 48°C (120°F) - = Data not available

	ALLUMINIUM	AISI 316	NBR	PP	EPDM	PVDF	PPS	PTFE	FPM	SANTOPRENE	PE
Weed Killers	D	A	A	-	-	-	-	-	A	-	-
Whey	B	A	A	-	-	-	-	A	A	-	-
Whiskey & Wines	C1	A	A	A	A	A	-	A	A	-	A
White Liquor (Pulp Mill)	B	A	A	A1	-	A1	-	A	A	-	-
White Water (Paper Mill)	-	A	-	A	-	-	-	-	A	-	-
Xylene	A1	B	D	B	D	A	A	A	B	D	C1
Zinc Chloride	D	B	A	A	A	A	A	A	A	A	A
Zinc Hydrosulfite	D	A	A	-	A	-	A	A	-	-	-
Zinc Sulfate	B	A	B	A	B	A	B	A	B	B	-

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