



Chemical Resistance Guide 10

Introduction

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INTRODUCTION

Introduction

This Chemical Resistance Guide is offered to assist in selecting pump materials that are most resistant to the chemicals that may be used with a Xylem pump. The information is based on Xylem laboratory tests, field testing programs, and general data from industry sources. It should be used only as a guide in the selection of pump materials. Suitability for the application should be determined by actual use and is the full responsibility of the customer. No warranty, expressed or implied, can be extended by Xylem where failure is caused by chemical attack on pump materials. Temperature, aeration, concentration, and other factors may change the effect of the specific fluid on the pump materials. Data shown is based on results at ambient temperatures, unless otherwise noted.

RATING SYSTEM

The "A" rating indicates little effect on the physical properties of the material (Generally Satisfactory).

The "B" rating indicates minor to moderate effect (Generally Satisfactory but Should be Qualified By Testing).

The "C" rating indicates a change in the physical properties in excess of acceptable tolerances could occur (Generally Not Satisfactory, Must be Qualified By Testing).

The "D" rating indicates rapid physical deterioration, swelling of check valves, or diaphragm, or chemical attack on the pump housing material (Not Satisfactory).

Where no rating is shown, data is not currently available, and pump materials should be qualified by testing.

It is recommended that the pump be thoroughly flushed with water or other neutralizing agent after each use whenever possible.

ELASTOMER	PROPERTIES	GENERAL CHEMICAL RESISTANCE	
		RESISTANT TO	ATTACKED BY
Buna-N	Excellent resistance to petroleum-based fluids. Good physical properties.	Many hydrocarbons, fats, oils, greases, hydraulic fluids, chemicals.	Ozone (except PVC blends), ketones, esters, aldehydes, chlorinated and nitro hydrocarbons.
EP/PP blend (Santoprene)	Resistant to a wide variety of solvents and chemicals. Excellent abrasion resistance and long mechanical flex life in hot and cold environments.	High polar fluids such as alcohols, ketones, glycols, esters, and aqueous solutions of acids, salts and bases.	Most hydrocarbons and petroleum- or oil-based products
EPDM	Excellent ozone, chemical, and aging resistance. Poor resistance to petroleum-based fluids.	Animal and vegetable oils, ozone, strong and oxidizing chemicals.	Mineral oils and solvents, aromatic hydrocarbons.
FFKM (Kalrez)	Excellent chemical resistance. Excellent high and low temperature properties.		
FKM (Viton)	Excellent oil and air resistance both at low and high temperatures. Very good chemical resistance.	All aliphatic, aromatic and halogenated hydrocarbons, acids, animal and vegetable oils.	Ketones, low molecular weight esters and nitro-containing compounds, and nitro hydrocarbons.
Fluoro-silicone	Moderate or oxidizing chemicals, ozone, aromatic chlorinated solvents, bases.	Brake fluids, hydrazine, ketones.	
Natural rubber	Excellent physical properties including abrasion and low temperature resistance. Poor resistance to petroleum-based fluids.	Most moderate chemicals, wet or dry, organic acids, alcohols, ketones, aldehydes and alkalies.	Ozone, strong acids, fats, oils, greases, most hydrocarbons including benzene, toluene, gasoline, and lubricating oils.
Neoprene	Good weathering resistance. Flame retarding. Moderate resistance to petroleum-based fluids.	Moderate chemicals and acids, ozone, oils, fats, greases, many oils and solvents.	Strong oxidizing acids, esters, ketones, chlorinated, aromatic and nitro hydrocarbons.
Silicone	Excellent high and low temperature properties. Fair physical properties.	Moderate or oxidizing chemicals, ozone, concentrated sodium hydroxide.	Many solvents, oils, concentrated acids, dilute sodium hydroxide.



GAS WARNING

No pump manufactured by Xylem should be used for gasoline or any fluid with a flash point below 100°F (38°C).

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CHEMICAL RESISTANCE GUIDE TABLES

	Plastics		Elastomers		Alloys	
	Polypropylene	Nylon	Polyethylene	Acetal Copolymer	Kynar	FKM
	Buna	Silicone	EPDM	EP/PP blend	FFKM	316 stainless steel
Polypropylene	A	A	D	C	D	A
Nylon	A	A	A	C	B	A
Polyethylene	A	A	D	C	B	A
Acetal Copolymer	A	A	A	C	B	A
Kynar	A	A	A	C	B	A
FKM	A	A	A	C	B	A
Buna	A	A	A	C	B	A
Silicone	A	A	A	C	B	A
EPDM	A	A	A	C	B	A
EP/PP blend	A	A	A	C	B	A
FFKM	A	A	A	C	B	A
316 stainless steel	A	A	A	C	B	A
Hastelloy	A	A	A	C	B	A

	Plastics		Elastomers		Alloys	
	Polypropylene	Nylon	Polyethylene	Acetal Copolymer	Kynar	FKM
	Buna	Silicone	EPDM	EP/PP blend	FFKM	316 stainless steel
Polypropylene	A	A	A	A	B	A
Nylon	A	A	A	A	B	A
Polyethylene	A	A	A	A	B	A
Acetal Copolymer	A	A	A	A	B	A
Kynar	A	A	A	A	B	A
FKM	A	A	A	A	B	A
Buna	A	A	A	A	B	A
Silicone	A	A	A	A	B	A
EPDM	A	A	A	A	B	A
EP/PP blend	A	A	A	A	B	A
FFKM	A	A	A	A	B	A
316 stainless steel	A	A	A	A	B	A
Hastelloy	A	A	A	A	B	A

	Plastics		Elastomers		Alloys	
	Polypropylene	Nylon	Polyethylene	Acetal Copolymer	Kynar	FKM
	Buna	Silicone	EPDM	EP/PP blend	FFKM	316 stainless steel
Polypropylene	A	B	A	N/A	A	A
Nylon	A	B	A	N/A	A	A
Polyethylene	A	B	A	N/A	A	A
Acetal Copolymer	A	B	A	N/A	A	A
Kynar	A	B	A	N/A	A	A
FKM	A	B	A	N/A	A	A
Buna	A	B	A	N/A	A	A
Silicone	A	B	A	N/A	A	A
EPDM	A	B	A	N/A	A	A
EP/PP blend	A	B	A	N/A	A	A
FFKM	A	B	A	N/A	A	A
316 stainless steel	A	B	A	N/A	A	A
Hastelloy	A	B	A	N/A	A	A

	Plastics		Elastomers		Alloys	
	Polypropylene	Nylon	Polyethylene	Acetal Copolymer	Kynar	FKM
	Buna	Silicone	EPDM	EP/PP blend	FFKM	316 stainless steel
Polypropylene	A	A	A	A	A	A
Nylon	A	A	A	A	A	A
Polyethylene	A	A	A	A	A	A
Acetal Copolymer	A	A	A	A	A	A
Kynar	A	A	A	A	A	A
FKM	A	A	A	A	A	A
Buna	A	A	A	A	A	A
Silicone	A	A	A	A	A	A
EPDM	A	A	A	A	A	A
EP/PP blend	A	A	A	A	A	A
FFKM	A	A	A	A	A	A
316 stainless steel	A	A	A	A	A	A
Hastelloy	A	A	A	A	A	A

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	Plastics			Elastomers			Alloys						
	Polypropylene	Nylon	Polyethylene	Acetal Copolymer	Kynar	FKM	Buna	Silicone	EPDM	EP/PP blend	FFKM	316 stainless steel	Hastelloy
Casein				A	A		A	A	A				
Catsup	A	A	B	N/A	A	A			A	A		A	
Caustic Lime				B	A		A		A				
Caustic Potash	A			D	A		A		A			B	
Caustic Soda	A			B	C		A		A		A	A	
Chloral Hydrate	A	D		A	C				A				
Chloracetic Acid	C	D	D	A	D	C		B	D	D	C	A	
Chloric Acid	D	C	D	N/A	D						A	C	
Chloric Acid, 20%	D		D	N/A						A			
Chlorinated Glue			D	N/A	A	C		B		A	A		
Chlorine Dioxide	C			D					D	A			
Chlorine (dry)	C	D	B	D	A	C	D	D	B	C	A	B	B
Chlorine Gas (dry)	D			B	C		D	C	B				
Chlorine Gas (wet)	D			C	C		D	C	B	A			
Chlorine (liquid)	C	D	C	A	A	A	C		D	A	D	A	
Chlorine Water	C		A	D	B	A	C		B	D	A	C	B
Chlorobenzene (Mono)	C	B	C	D	A	A	D	D	D	C	A	B	B
Chloroform	C	D	C	A	A	A	D	D	D	C	A	A	A
Chlorosulfonic Acid	D	D	D	D	D	D	D	D	C	A	D	A	
Chlorox Bleach	D	A	B		A	B		B		A	A		
Chocolate Syrup	A	A		A	N/A	A	A				A	A	
Chresylic Acid, 50%		D		A	D		A	A					
Chrom Alum	C		A		A	A	A			A			
Chromic Acid, 05%	B	D	B	D	A	A	D	C	A	A	A	A	A
Chromic Acid, 10%	C	D	A	D	A	B	D	C	B		A	B	A
Chromic Acid, 20%	C	D	A		B	C	C	B		A			
Chromic Acid, 30%	C	D	A	D	A	A	D	C	B		A	B	
Chromic Acid, 50%	C	D	C	D	A	A	D	C	B	A	A	B	D
Chromium Alum	A				A			A		A			
Cider	A		B	A	N/A	A	A			A	A	A	
Citric Acid	A	A	A	B	A	A	A	A	A	A	A	A	A
Citric Oils	A			B	N/A	A	A		B	C	A	A	
Cobalt Chloride				A	A	B	A	A	A				
Coconut Oil	A		A		A	A	A	A	B	A	A		
Coffee	A	A		A	N/A	A	A	A	A	A	A	A	
Copper Chloride	A	A	B	A	A	A	A	A	A	A	C	B	
Copper Cyanide	A	A	A	A	A	A	A	A	A	A	A	B	B
Copper Fluoborate			B	N/A	A	B			A	A	D	B	
Copper Nitrate	A	D	B	A	A	A	A		A	A	B	C	
Copper Sulfate	A	C	B	D	A	A	A	A	A	A	B	B	B

	Plastics			Elastomers			Alloys						
	Polypropylene	Nylon	Polyethylene	Acetal Copolymer	Kynar	FKM	Buna	Silicone	EPDM	EP/PP blend	FFKM	316 stainless steel	Hastelloy
Cream	A	A	A	N/A	A	A				A	A		
Cresols	D	D	C	D	A	A	D	D	D	D	A	A	B
Caustic Lime	D	D	B	D	B	A	D	D	D	D	A	A	B
Cresylic Acid	D	D	B	D	B	A	D	D	D	D	A	A	B
Cyanic Acid			D	N/A	A	C				A			
Cyclohexane	C	A	B	A	A	B	D	D	C	A	A	B	
Detergents	B	A	A	A	A	A	A	A	B	A	A	B	
Diacetone Alcohol	A		N/A	D	D	D	D	A	B	A			
Diazo Salts	A		A								A		
Dibutyl Amine					C	C	D	C	A				
Dibutyl Ether					C	C	D	C	B	A			
Dibutyl Phthalate	B	A			B	D	B	A	B	A		B	
Dibutyl Sebacate					C		B	B	B	A			
Dichlorethane	A	C	C		C				D	A	B		
Dichloromethane					B	D		D		D	A		
Diesel Fuel	B	C	A	A	A	A	D	D	A	A	B		
Diethylamine	B	A	D	B	D	C	C	B	B	C	A	B	
Diethyl Ether	B		N/A	A	C	D	D	C	B	A		B	
Diethyl Oxide					D	B		D		A			
Diethylene Glycol	A	A	B	A	A	A	D	A	A	A	A		
Diglycolic Acid	A			D	A	A			A		A		
Diisobutyl Ketone					D			D	B	A			
Diisobutylene					A		D	D	A				
Diisooctyl Phthalate					B			B	C	A			
Diisopropyl Ketone					D		D	B	C	A			
Dimethyl Amne	A				D	B	C	A					
Dimethyl Benzene					A	D	D	A					
Dimethyl Ether				D	D	B	B	B	A				
Dimethyl Formamide	A	A			C	B	B	B	A				
Dimethyl Ketone					D	D	A		A				
Dimethyl Phthalate				D	D	B	C	B	A				
Dimethylamine	A				D		D	D	A				
Glucose	A	B	A	B	A	A	A	A	A	A	A	A	A
Glue	A	A	A	A	A	A	A	A	A	A	A	A	A
Glycerin	A	A	A	N/A	A	A	A	A	A	A	A	A	A
Glycerol	A	A	A	A	A	A	A	A	A	A	A	A	A
Glycolic Acid	A	A			A	A	A	A	A	A	A	B	B
Gold Monocyanide					A	B	A	A			C	A	A
Grape Juice		A	B	A	A	A	A			A	A	A	
Grease					A	A	A	D			A	A	A
Heptane	C	A	C	D	A	A	A	D	D	B	A	A	B
Hexane	C	A	C	A	A	A	A	D	D	C	A	A	B
Ethyl Chloride	C	A	B	A	D	A	A	D	A	D	A	A	B

	Plastics			Elastomers			Alloys						
	Polypropylene	Nylon	Polyethylene	Acetal Copolymer	Kynar	FKM	Buna	Silicone	EPDM	EP/PP blend	FFKM	316 stainless steel	Hastelloy

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	Polypropylene	Nylon	Polyethylene	Acetal Copolymer	Kynar	FKM	Buna	Silicone	EPDM	EP/PP blend	FFKM	316 stainless steel	Hastelloy
Hydrochlorous Acid	A	A			B	D		B	A	A	D		
Ink	A	C	D	B	A	A			A	A	A		
Iodine	B	D	B	D	A	A	B		B	A	C	B	
Isotane	D	D	N/A	A	A	A				A			
Isopropyl Acetate	B	B	B	D	D	D	B	B	A	B	B		
Isopropyl Ether	C	A	C	D	D	D	B	D	D	C	A	A	
Jet Fuel JP-3	A	A	C	A	B	A	A	D	D		A	A	A
Jet Fuel JP-4	B	A	C	A	B	A	B	D	D		A	A	A
Jet Fuel JP-5	B	A	C	A	B	A	A	D	D		A	A	A
Kerosene	A	A	C	A	A	A	D	D	C	A	A	A	
Ketones	B	A	C	D	C	D	D	C	C	C	A	A	B
Laquer	B	A	C	D	D	D	D	C	A	A	A		
Laquer Thinner	B	A	B	D	N/A	D	D	D	A	C	A	A	
Lactic Acid	A	C	B	B	B	A	A	D	B	A	A	B	
Lard	A	A	B	A	A	A	A	A	C	B	A	A	
Latex	A	A	A	B	A	A	A	B	B	A	A	A	
Lead Acetate	A	B	B	B	A	D	B		A	A	A	B	B
Lead Chloride	A					A	D	A			A		
Lead Nitrate	A			N/A	A	A	A		A		A	B	B
Lead Sulfamate	A	B	A	A	A	A	B	B	A	A	A	B	
Ligroin	B	D	C	B	A	A	A	B	C	B	A	A	
Lime	A	A	B	B	A	A	A	D	C	A	A	A	
Linoleic Acid	A			B	A	B	B	B	D	B	A	A	
Linseed Oil	A	A	D			A	A	B	B	B	A	A	A
Lubricants	A	A	D	A	A	A	A	A	D	D	A	A	B
Magnesium Carbonate	A			A	A	A	A	D	A	A	A	B	
Magnesium Chloride	A	A	A	B	A	A	A	A	A	A	A	A	
Magnesium Carbonate	A	B	A	A	A	A	A	A	A	A	A	B	
Magnesium Nitrate	A	A	A	A	A	A	A	A	A	A	A	B	
Magnesium Oxide				A	N/A	A			A	A	A		
Magnesium Sulfate	A	A	A	B	A	A	A	A	A	A	A	B	A
Maleic Acid	A	B	B	A	A	A	D	A	D	A	A	B	B
Maleic Anhydride	D			D	A	A	D	B	D	A	A	A	
Mash	A			A	N/A	A	A		A	A	A	A	
Mayonnaise		A	B	A	A	A	A			A	A	A	
Melamine	A	A		A	N/A	A	C	A		A	D		
Mercuric Chloride	A	D	A	B	A	A	A			A	A	C	D
Mercuric Cyanide	A	A	A	N/A	A	A	A			A	A	B	D
Mercury	B	A	A	A	A	A	A		A	A	A	B	B

	Plastics			Elastomers			Alloys						
	Polypropylene	Nylon	Polyethylene	Acetal Copolymer	Kynar	FKM	Buna	Silicone	EPDM	EP/PP blend	FFKM	316 stainless steel	Hastelloy
Methyl Acetate	D	A	B	B	B	D	D	D	B	B	A	A	B
Methyl Acrylate	D		B	B	B	D	D	D	B	D	A		
Methyl Acetone		A		D	D	A	D			B	A	A	
Methyl Bromide	C	C	D	D	A	A	D			D	A	A	
Methyl Butyl Ketone	D	D	A	D	D	D	D	A	C	A	A	B	
Methyl Cellosolve	B	C	B	D	A	D	C	D	B	B	A	A	
Methyl Chloride	D	C	C	B	A	A	D	D	C	D	A	B	
Methyl Dichloride	D	C		D	D	A	D	D	D	D	A		
Methyl Ethyl Ketone	A	A	B	C	D	D	D	D	A	B	A	B	
Methyl Isobutyl Ketone	C	A	A	N/A	D	D	D	C			A	A	
Methyl Isopropyl Ketone	D	D	D	N/A	N/A	D	D	D	B	C	A	A	
Methyl Methacrylate	D			D	B	D	D	C	D	B	A		
Methylamine	D			D	C	D	D	E	A	A	A		
Methylene Chloride	B	C	C	B	B	B	D	D	D	D	A	B	A
Milk	B	A	E	A	A	A	A	E	A	A	A	A	
Mineral Oil	A	A	D	A	N/A	A	A	B	D	D	A	A	
Molasses	A	A	E	A	B	A	A		C	A	A	A	
Motor Oil	C			B	B	A	A	D		A			
Mustard	A	A	A	C	A	D	C	A	A	A	A	A	
Naptha	C	A	A	A	A	A	C	D	D	C	A	B	
Naphthalene	B	A	A	A	A	D	D	D	C	A	B		
Natural Gas	A			B	N/A	A	A	A	D	C	A		
Neon						A	A	A	A		A		
Nickle Chloride	A	C	B	A	A	A	A	A	A	A	C	A	
Nickle Sulfate	A	A	B	A	A	A	A	A	A	A	B	B	
Nitric Acid, 5-10%	A	C	B	D	A	A	D	C	D	A	A	D	
Nitric Acid, 20%	A	D	C	D	A	A	D	D	B	B	A	A	
Nitric Acid, 50%	D	D	C	D	A	A	D	D	D	C	A	D	
Nitric Acid (concentrated)	D	D	C	D	A	A	D	D	D	C	A	A	
Nitrobenzene	B	B	C	C	A	B	D	D	D	B	A	C	
Oil - Aniline	A	A		D	A	C	D	D	B	C	A	A	
Oil - Anise		A		D	N/A					A	A		
Oil - Bay					D	A	A			A	A		
Oil - Bone	A				D	A	A			A	A		
Oil - Castor	A	A			A	A	A	A	B	B	A	A	
Oil - Cinnamon		A		D	N/A	A			C	A	A		
Oil - Citric	A			A	A	A			C	A			

	Plastics			Elastomers			Alloys						
	Polypropylene	Nylon	Polyethylene	Acetal Copolymer	Kynar	FKM	Buna	Silicone	EPDM	EP/PP blend	FFKM	316 stainless steel	Hastelloy
Oil - Clove		A		N/A	N/A	A	A			C	A	A	
Oil - Cod Liver	A			B	A	A	A	B</td					

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	Plastics			Elastomers			Alloys						
	Polypropylene	Nylon	Polyethylene	Acetal Copolymer	Kynar	FKM	Buna	Silicone	EPDM	E/P/PP blend	FFKM	316 stainless steel	Hastelloy
Potassium Carbonate	A	A	A				A	A	A	B	B		
Potassium Chlorate	A		A	B	A	A			A	A	B	B	
Potassium Chloride	A	B	A	A	A	A	A	A	A	A	B	B	
Potassium Chromate	A	A	A	C	B	A	A			A	A	B	A
Potassium Cyanide Solutions	A	A	A	C	A	A	A	A	A	A	A	B	B
Potassium Dichromate	A	A	A	A	A	A	A	A	A	A	A	B	B
Potassium Ferrrocyanide	A	D	A	N/A	A	A	A			A	B	B	
Potassium Hydroxide	A	B	A	A	A	B	B	C		A	A	B	B
Potassium Iodide	A	C		N/A	A	A	A		A		A	A	
Potassium Nitrate	A		B	A	A	B	A	A	A	A	A	B	D
Potassium Perborate	A	B	A	N/A	N/A						A		
Potassium Perchlorate	A		A				A		A		A		
Potassium Permanganate	A		A	A	A	B	A		A	A	A	B	B
Potassium Persulfate	A	D	A			A	A		A	A	A	A	
Potassium Sulfate	A		A	B	A	A	A	A	A	A	A	B	
Potassium Sulfide	A	A	A	N/A	A	A	A	A	A	A	A	A	
Potassium Thiosulfate	A			A		A				A			
Propane	B			A	A	A	D	D	C	A	A		
Propanol		A				A	A		A		A		
Propargyl Alcohol	A		A							A			
Propyl Acetate						D	D	D	B	B	A		
Propylene				N/A	N/A	A	D	D	D	B	A		
Propylene Dichloride	C	C			D	D		D		A			
Propylene Glycol	A		B	B	N/A	A	A		A	A	A	A	B
Pyridine	A	A	B	B	D	D	D	B	A	A	A	A	
Pyrogallic Acid	A			D	A	A				A	B	B	
Rosins	A	A	B	B	N/A	A	A			A	A	A	A
Rum	A	A		A	N/A	A	A		A	A	A	A	
Rust Inhibitors	A			A	N/A	A	A		B	A	A		
Salad Dressing	A	A		A	N/A	A	A		A	A	A	A	
Sea Water	A	A	A	A	A	A	A	A	A	A	A	A	A
Sewage	A			A	N/A	A	A	B	B	A	A	A	
Shellac(Bleached)	A	A	A	A	N/A	A		A	A	A	A	A	A
Shellac(Orange)	A	A	A	A	A		A		C	A	A		
Silicic Acid	A		A			A	A			A			
Silicone	A	A				A	A	C	A		A	B	D

	Plastics			Elastomers			Alloys						
	Polypropylene	Nylon	Polyethylene	Acetal Copolymer	Kynar	FKM	Buna	Silicone	EPDM	E/P/PP blend	FFKM	316 stainless steel	Hastelloy
Silver Bromide				C	N/A				A	B	B		
Silver Cyanide	A					A			A		A		
Silver Nitrate	A	A	B	A	A	A	B	A	A	A	B	B	
Silver Salts	A		A			A	A			A	A		
Silver Sulfate	A			A	A	C		A	A	A			
Soap Solutions	A	A	B	B	A	A	A	A	A	A	B	B	
Sodium Acetate	A	B	B	B	N/A	D	B	D	A	A	A	B	
Sodium Aluminate	A	A	A	A	A	A	A		A	A	A	B	
Sodium Bicarbonate	A	A	A	B	A	A	B	D	A	A	A	B	B
Sodium Bisulfate	A	A	A	C	A	A	B		A	A	B	B	
Sodium Bisulfide	A	A	A	N/A	A	A	A	A	A	A	A	B	
Sodium Borate	A	A	A	A	A	A	A	A	A	A	A	B	
Sodium Carbonate	A	B	B	A	A	A	A	A	A	A	A	B	
Sodium Chlorate	A	D	B	A	A	A			A	A	B		
Sodium Chloride	A	A	A	D	A	A	A	A	A	A	B	A	
Sodium Chromate	D		A	A	A	A			A	A	B		
Sodium Cyanide	A	A	A	N/A	N/A	A	A	A	A	A	A		
Sodium Hydroxide, 20%	A	A	A	A	A	B	B	B	A	A	A	A	A
Sodium Hydroxide, 50%	A	A	A	A	A	B	B	B	A	A	B	A	
Sodium Hydroxide, 80%	A		B	D	A	B	B	B	A	A	B		
Sodium Hypochlorite, < 20%	B	D	A	D	A	A	B	B	B		A	C	
Sodium Hypochlorite, 100%	B	D	B	D	A	A	B	B	B		A		
Sodium Hyposulfite				N/A	N/A					A	A		
Sodium Metaphosphate	A	A	A	B	A	A	A		A	A	A		
Sodium Metasilicate	A			D	N/A	A	A		A	A	A	A	
Sodium Nitrate	A	A	A	A	A	B	D	A	A	B	B		
Sodium Perborate	A	B	A	B	N/A	A	B	B	A	A	B	B	
Sodium Peroxide	B	A	A	D	A	A	B	D	A	B	A	C	
Sodium Phosphate Alkaline	A	A				A	A	A		A		B	
Sodium Phosphate Neutral	A	A		B	A	A	A		A	A	A	B	
Sodium Polyphosphate	A	A	A	C	A	A	D	A	A	A	B		
Sodium Silicate	A	A	A	B	A	A		A	A	A	C		
Shellac(Bleached)	A	A	A	A	N/A	A		A	A	A	A	A	
Shellac(Orange)	A	A	A	A	A			C	A	A			
Silicic Acid	A		A			A	A						
Silicone	A	D	B			A	A	A		A	B	D	

	Plastics			Elastomers			Alloys						
	Polypropylene	Nylon	Polyethylene	Acetal Copolymer	Kynar	FKM	Buna	Silicone	EPDM	E/P/PP blend	FFKM	316 stainless steel	Hastelloy
Sodium Tetraborate		A	A	B	N/A	A	A			A	A	A	
Sodium Thiocyanate			A			A		A	D		A		
Sodium Thiosulfate	A	B	A	C	A	A	B		A	A	A		
Sorghum		A		A	N/A	A	A			A	A	A	
Soy Sauce	A		A	N/A	A	A				A	A	A	
Soybean Oil			A			A			A	C	A	A	
Stannic Chloride	A	B	A	C	A								