



# CIRCLE SEAL CONTROLS, INC.

## CHEMICAL RESISTANCE CHART Material Guide for Valve Selection

	KEL-F	RYTON® (PPS)	EPOXY	TFL	NYLON	POLYPROPYLENE	BRASS	303 S.S.	316 S.S.	ALUMINUM	BUNA N	ETHYLENE/PROPYLENE	TYGON	VITON	SILICONE		KEL-F	RYTON® (PPS)	EPOXY	TFL	NYLON	POLYPROPYLENE	BRASS	303 S.S.	316 S.S.	ALUMINUM	BUNA N	ETHYLENE/PROPYLENE	TYGON	VITON	SILICONE			
Acetaldehyde	A	A	A	A	A	D	A	A	B	D	B	D	A	B	A	Amyl Acetate	A	A	A	A	D	C	A	A	A	D	A	D	D	C	A			
Acetamide	A	A	A	A	A	A	A	A	B	D	A	A	A	A	A	Amyl Alcohol	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A			
Acetate Solvent	A	A	A	A	D	B	A	B	D	D	D	D	B	B	B	Amyl Chloride	A	A	A	A	A	A	A	A	A	D	D	D	C	A	A			
Acetic Acid, Glacial	A	A	B	A	A	A	A	A	**	B	B	D	C	D	D	Aniline	A	A	A	A	A	A	A	A	A	D	D	D	D	C	A			
Acetic Acid	A	A	A	A	C	A	D	A	A	C	B	C	C	C	C	Anti-Freeze	A	A	A	A	A	A	A	A	A	D	D	D	D	C	A			
Acetic Anhydride	A	A	A	A	A	A	D	A	A	C	B	D	C	C	C	Aqua Regia	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A			
Acetone	A	A	A	A	A	A	A	A	A	D	A	D	D	B	B	(80% HCl, 20% HNO <sub>3</sub> )	D	D	A	A	B		D	D	D	D	D	B	A	A	A			
Acetylene	A	A	A	A	A	*	A	A	A	A	A	D	D	D	D	Arochlor 1248	D	A	A	A	A		D	D	D	D	D	B	A	A	A			
Acrylonitrile	A	A	A	A	A	A	A	A	A	D	D	D	C	G	C	Aromatic Hydrocarbons	A	A	A	A	A		A	B	A	A	D	D	D	D	C			
Alcohols	A	A	A	A	A	B	A	B	B	C	B	C	B	B	B	Arsenic Acid	A	A	A	A	A	B	A	B	A	A	D	D	D	A	A			
Amyl	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	Asphalt	A	A	A	A	A	B	A	A	A	A	D	D	D	A	A			
Benzyl	A	A	A	A	A	A	A	A	A	B	A	A	A	A	A	Barium Carbonate	A	A	A	A	A	A	B	A	A	A	A	A	A	A	A	A		
Butyl	A	A	A	A	A	B	A	A	A	A	A	A	A	A	A	Barium Chloride	A	A	A	A	A	D	A	B	D	A	A	A	A	A	A	A		
Diacetone	A	A	A	A	A	*	A	A	A	D	A	D	D	D	D	Barium Cyanide	A	A	A	A	A	A	B	D	A	A	A	A	A	A	A	A	A	
Ethyl	A	A	A	A	A	A	A	A	A	A	B	A	A	A	A	Barium Hydroxide	A	A	A	A	A	A	A	A	A	C	A	A	A	A	A	A		
Hexyl	A	A	A	A	A	A	A	A	A	A	A	A	A	C	C	Barium Nitrate	A	A	A	A	A	C	D	A	A	D	A	A	A	A	A	A	A	
Isobutyl	A	A	A	A	A	A	A	A	A	B	A	A	A	A	A	Barium Sulfate	A	A	B	A	A	A	A	A	A	A	A	A	A	A	A	A	A	
Isopropyl	A	A	A	A	A	A	A	A	A	B	A	A	A	A	A	Barium Sulfide	A	A	B	A	A	A	A	A	A	A	A	A	A	A	A	A	A	
Methyl	A	A	A	A	A	A	A	A	A	A	A	A	A	D	D	Beer	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	
Octyl	A	A	A	A	A	A	A	A	A	B	A	A	A	A	A	Beet Sugar Liquids	A	A	A	A	A	A	B	C	A	A	A	A	A	A	A	A	B	
Propyl	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	Benzaldehyde	A	B	A	A	*	A	A	A	A	A	D	D	D	B	B	B		
Aluminum Chloride 20%	A	A	A	A	A	D	D	C	D	A	A	B	A	C	C	Benzene	D	A	A	A	*	A	A	B	A	D	D	D	D	A	B	B		
Aluminum Fluoride	A	A	A	A	A	A	C	C	C	A	A	A	A	A	A	Benzoic Acid	A	A	A	A	*	B	A	B	B	D	D	D	D	C	A	A	A	
Aluminum Hydroxide	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	Benzol	A	A	A	A	A	A	A	A	A	A	D	D	D	D	C	A	A	
Aluminum Potassium Sulfate (Aluminum)	A	A	A	A	A	C	A	C	C	A	A	B	A	A	A	Borax (Sodium Borate)	A	A	A	A	A	C	A	A	A	C	B	A	A	A	A	A	A	
Aluminum Sulfate	A	A	A	A	A	D	A	C	C	A	A	B	A	C	C	Boric Acid	A	A	A	A	A	D	A	B	A	A	A	A	A	A	A	A	C	
Amines	B	A	A	A	A	B	A	A	A	D	B	D	D	D	D	Brewery Slop	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Ammonia, Anhydrous	A	A	A	A	A	A	A	A	A	C	A	D	D	D	D	Bromine	A	D	C	A	*	C	D	D	D	D	D	D	D	D	D	D	D	
Ammonia, Liquids	A	A	A	A	A	A	A	A	A	C	A	B	D	X	X	Butadiene	A	A	A	A	*	A	A	A	A	A	A	A	A	A	A	A	A	
Ammonia, Nitrate	A	A	A	A	A	A	A	A	A	C	A	B	D	X	X	Butane	A	A	A	A	*	A	A	A	A	A	A	A	A	A	A	A	A	
Ammonium Bifluoride	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	Butter	A	A	A	A	*	A	A	A	A	A	A	A	A	A	A	A	A	
Ammonium Carbonate	A	A	A	A	A	A	B	A	B	B	A	B	A	B	B	Buttermilk	A	A	A	A	A	D	C	A	A	A	A	A	A	A	A	A	A	
Ammonium Casenite	A	A	A	A	A	A	A	A	A	A	B	A	B	B	B	Butylene	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	
Ammonium Chloride	A	A	A	A	A	D	D	B	C	B	A	C	B	B	B	Butyl Acetate	A	A	A	A	*	D	C	B	A	D	B	D	D	D	C	C	C	
Ammonium Hydroxide	A	A	A	A	A	D	A	A	C	A	A	C	B	B	B	Butyric Acid	A	A	A	A	A	D	C	B	A	D	B	B	C	D	D	D	C	
Ammonium Nitrate	A	A	A	A	A	A	A	A	C	A	A	A	A	B	B																			
Ammonium Oxalate	A	A	A	A	A	A	A	A	A	A	A	A	A	B	B																			
Ammonium Persulfate	A	A	A	A	A	D	A	A	A	D	A	A	A	A	A																			
Ammonium Phosphate, Dibasic	A	A	A	A	A	D	A	A	A	A	A	A	A	B	A																			
Ammonium Phosphate, Monobasic	A	A	A	A	A	A	A	C	A	A	A	A	A	A	A																			
Ammonium Phosphate, Tribasic	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A																			
Ammonium Sulfate	A	A	A	A	A	D	B	C	A	A	A	A	A	A	A																			
Ammonium Thio-Sulfate	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A																			

A—No effect—Excellent

B—Minor effect—Good

C—Moderate effect—Fair, contact Angar

D—Severe effect—Not recommended

X—Carbon/Ceramic Seal

†—P.V.C.—Satisfactory to 72° F

°—Polypropylene—Satisfactory to 72° F

††—Polypropylene—Satisfactory to 120° F

\*\*—BUNA N—Satisfactory for Seal & O-Rings

	KEL-F	RYTON® (PPS)	EPOXY	TFL	NYLON	POLYPROPYLENE	BRASS	303 S.S.	316 S.S.	ALUMINIUM	BUNA N	ETHYLENE/PROPYLENE	TYGON	VITON	SILICONE		KEL-F	RYTON® (PPS)	EPOXY	TFL	NYLON	POLYPROPYLENE	BRASS	303 S.S.	316 S.S.	ALUMINIUM	BUNA N	ETHYLENE/PROPYLENE	TYGON	VITON	SILICONE	
Carbon Dioxide	A		A	A	A	A	A	A	A	A	A	B	A	A		Formic Acid	A		A	A	A	A	D	B	B	D	D	C	B	C		
Carbon Disulfide			A	A	A	*	A	A	A	A	D	D	A	A		Freon 11		A	A	A	A	A	A	A	A	D	D	B	B	A		
Carbon Monoxide			A	A	A	A	A	A	A	A	A	A	A	A		Freon 12 (wet)	C		A	A	A	A	B	C	A	A	A	D	D	C		
Carbon Tetrachloride	B		A	A	A	D	B	A	A	C	D	D	C	A	C	Freon 22		A	A	A	A	A	A	A	A	B	C	A	D	C		
Carbonated Water			A	A	A	A	A	A	A	A	A	A	A	A		Freon 113		A	A	A	A	A	A	A	A	A	A	C	C	B		
Carbonic Acid			A	A	A	A	A	A	B	B	A	A	A	A		Freon T. F.		A	A	A	A	A	A	A	A	A	C	C	D	B		
Catsup			A	A	A	A	A	A	A	A	A	A	A	A		Fruit Juice		A	A	A	A	A	A	C	A	A	A	A	B	A		
Chloroacetic Acid	A		C	A	A		D	D	D	D	D	B	D	D	A	Fuel Oils		A	A	A	A	A	B	A	A	A	A	A	D	A		
Chlorinated Glue			A	A	A			A	A	C	B	B	C	A	C	Furan Resin		A	A	A	A	A		A	A	A	A	D	B	D		
Chlorine, Anhydrous Liquid	B		B	A			D	D	D	D	D	B	C	A	C	Furfural		B	A	A	*	C	A	A	A	A	D	B	D	D		
Chlorobenzene (Mono)		A	A	A	A	D	D	A	A	D	D	D	D	C	A																	
Chloroform			A	A	A	D	D	A	A	D	D	D	D	C	A	Gasoline	A	A	A	A	D	A	A	A	A	A	**	D	D	D		
Chlorosulfonic Acid			C	A	A	D	D	A	D	D	D	D	C	D	C	Gelatin		A	A	A	A	A	A	C	A	A	A	A	A	A		
Chlorox (Bleach)	D		A	A	A	D		A	A	A	B	B	A	A		Glucose		A	A	A	A	A	A	A	A	A	A	A	A	A		
Chocolate Syrup			A	A	A			A	A	A	A	A	A	A		Glue P.V.A.		A	A	A	A	*	A	C	A	A	A	A	A	A		
Chromic Acid 5%	A		B	A			D	A	A	A	A	B	A	C		Glycerine		A	A	A	A	A	B	A	A	A	A	A	A	B		
Chromic Acid 50%	A		B	A			D	D	A	A	A	B	A	C		Glycolic Acid		A	A	A	A	A		A	A	A	A	A	A	B		
Cider			A	A	A	A		A	A	A	A	A	A	A		Gold Monocyanide									A	A	A	A	A	A		
Citric Acid	A		A	A	A	A	D	B	A	A	A	B	A	C		Grape Juice									A	A	A	A	A	A		
Citric Oils			A	A	A	A		A	A	A	A	A	A	A		Grease			A	A					A	**				A		
Coffee			A	A	A	A		A	A	A	A	A	A	A	B	Heptane			A	A	A	*	D	A	A	A	A	D	A	A		
Copper Chloride			A	A	A	A		D	B	A	A	A	A	A		Hexane			A	A				A	A	A	A	D	A	A		
Copper Cyanide			A	A	A	A		A	D	B	A	A	A	A		Honey			A		D	A		A	A	A	A	A	A	A		
Copper Fluoborate			A	A	A	A		A	D	B	A	A	A	A		Hydraulic Oils									A	A	A	A	A	A		
Copper Nitrate	A		A	A	A	A	D	A	A	D	A	A	A	A		(Petroleum)			A						A	A	A	D	D	D		
Copper Sulfate	A		A	A	A	A	D	C	A	D	A	A	A	A		Hydraulic Oils										A	A	A	A	A		
Cream			A	A	A	A		A	A	A	A	A	A	A		(Synthetic)			A							A	A	A	A	A		
Cresols		A	A	A	A	*		A	A	A	D	D	D	A	A	Hydrazine			A	A	A				A	A	A	A	A	A		
Cresylic Acid			A	A	A	D		A	A	A	D	D	D	A	A	Hydrobromic Acid			A	A	A	A	D	D	D	D	C	C	C	B		
Cyclohexane		A	A	A	A	D		A	A	A	B	D	A	A		Hydrochloric Acid (20%)	A	A	A	A	A	A	D	D	D	D	C	C	C	B		
Cyanic Acid			A	A	A			A	A	A	C					Hydrochloric Acid (37%)	A	A	A	A	A	A	D	D	D	D	C	C	C	B		
Detergents			A	A	A	A		A	A	**	A	A	A	A		Hydrocyanic Acid	A	A	A	A	A	A	A	D	D	D	D	C	C	C	B	
Diesel Fuel			A	A	A	A		A	A	A	**	D	A	A		Hydrofluoric Acid (20%)	A	A	B	A	A	A	D	D	D	D	C	C	C	A	D	
Diethylamine			A	A	A	A		A	A	A	B	B	B	A		Hydrofluoric Acid (50%)	A	A	C		*	D	D	D	B	D	C	C	C	A	D	
Diethylene Glycol			A	A	A		A	A	A	A	A	A	A	A		Hydrofluoric Acid (75%)	A	A	A	C		*	D	D	D	B	D	C	C	C	A	D
Diphenyl Oxide			A	A	A			A	A	A	D	D	A	A		Hydrofluosilicic Acid (20%)	A	A	A	A	A	D	D	D	D	A	A	A	A	A	A	
Dyes			A	A	A			A	A	A	D	D	A	A		Hydrogen Peroxide	A	A	A	A	A	A	D	C	A	A	A	A	C	A	B	
Epsom Salts (Magnesium Sulfate)			A	A	A			A	A	A	A	A	A	A		Hydrogen Sulfide, Aqueous Solution	A	A	A	A	A	D	B	A	A	B	A	B	A	A	A	
Ethane			A	A	A			A	A	A	A	D	A	A		Hydroxyacetic Acid (70%)									A	A	A	A	A	A	A	
Ethanolamine			A	A	A	A		A	A	A	B	A	A	D		Ink			A	A	C			C	A	A	A	B	B	A	A	
Ether		B	A	A	A	††		A	A	A	D	C	C	C	D	Iodine		A	A	A	A	D	D	D	D	D	A	B	B	A	A	
Ethyl Acetate		A	A	A	A	A		A	A	A	C	D	B	D	C	Isotane			A	A	A					A	A	A	A	A	A	
Ethyl Chloride	B		A	A	A	D	B	C	A	A	A	A	A	A	C	Isopropyl Acetate			A	A	A				B	A	D	B	D	D	D	
Ethyl Sulfate			A	A	A			A	D	A	A	A	A	A		Isopropyl Ether			A		A				A	A	A	A	A	A	A	
Ethylene Chloride			A	A	A	D		A	A	A	D	C	A	A		Jet Fuel (JP3, JP4, JP5)									A	B	D	A	A	A	A	
Ethylene Dichloride			A	A	A	A		A	A	A	D	C	D	A	C	Kerosene	A		A	A	A	A			A	A	D	D	D	D	D	
Ethylene Glycol	A		A	A	A	A	B	A	A	A	A	A	A	C		Ketones		B	B	B	B	A	A		A	A	D	D	D	D	C	
Ethylene Oxide			A	A	A			A	A	A	D	C	A	D		Lacquers			A	A	A	A		C	A	A	D	D	D	D	D	
Fatty Acids	A		A	A	A	A	C	A	A	A	B	C	B	A	C	Lactic Acid			A	A	A	A	D	C	A	A	D	D	D	D	D	
Ferric Chloride	A		A	A	A	A	D	D	D	D	A	A	A	B	A	Lard			A	A	A	A	D	C	A	A	D	D	D	D	D	
Ferric Nitrate	A		A	A	A	A	D	A	B	D	A	A	A	A		Lead Acetate			A	A	A	A			A	A	A	B	A	A	A	
Ferric Sulfate	A		A	A	A	A	D	D	A	D	B	B	A	C		Lead Sulfamate			A	A	A	A			A	A	A	B	A	A	A	
Ferrous Chloride			A	A	A	A	D	D	D	A	B	B	A	A		Ligroin			A	A	A	A			A	A	A	A	A	A	A	
Ferrous Sulfate	A		A	A	A	A	D	A	B	A	B	B	A	A		Lime			A	A	A	††			A	A	A	A	A	A	A	
Fluoboric Acid			A	A	A	A		A	B	A	B	B	A	A												A	B	A	A	A	A	
Fluosilicic Acid			A	A	A	A		A	B	A	B	B	A	A												A	B	A	A	A	A	
Formaldehyde	A		A	A	A	A	C	A	A	A	C	B	C	A	B											A	A	A	A	A	A	

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Potassium Hydroxide	A	A	A	A	A	D	A	B	D	A	B	D	B	D	B	Stannic Chloride	A	A	A	A	A	D	A	D	A	A	A	A	A	A	B
Potassium Nitrate																Stannic Fluoborate															
Potassium Permanganate	A	A	A	A	A	B	A	B	A	A	A	A	A	A	A	Starch		A	A	A	A	A	A	A	A	A	A	A	A	A	A
Potassium Sulfate	A	A	A	A	A	B	A	B	A	A	A	A	A	A	A	Steric Acid		A	A	A	A	*	B	B	A	B	B	B	B	C	
Propane (Liquified)	A	A	A	A	*	A	A	A	A	A	A	D	D	D	Stoddard Solvent		A	A	A	A											
Propylene Glycol															Styrene		A	A	A	A											
Pyridine	B	A	A	A		D	B	A	A	A	D	B	D	D	Sugar (Liquids)		A	A	A	A		A	A	A	A	A	A	B	A		
Pyrogalllic Acid	A	A	A			B	C	A	B						Sulfate Liquors		A	A	A	A		C	C	D	D	D	D	C	A	A	
Rosins	A	A	A	A	C		A	A	A	A	A				Sulfur Chloride	A	C	A	A	A	*	D	D	D	D	D	D	C	A	B	
Rum															Sulfur Dioxide	A	A	A	A	*	C	C	C	C	C	C	C	C	C	B	
Rust Inhibitors					A		A	A	A	A	A				Sulfur Trioxide	A	A	A	A	A		C	C	C	C	C	C	C	C	C	B
Salad Dressing			A				A	A	A	A	A				Sulfuric Acid (to 10%)	A	A	A	A	C	A	D	D	D	D	D	D	D	D	D	B
Sea Water			A	A	A	A	A	A	A	A	A	A			Sulfuric Acid 10%-75%	A	A	A	A	A	A	D	D	D	D	D	D	D	D	D	D
Shellac (Bleached)			A	A	A		A	A	A	A	A				Sulfuric Acid 75%-95%	A	A	A	A	A	A	D	D	D	D	D	D	D	D	D	D
Shellac (Orange)			A	A	A		A	A	A	A	A				Sulfuric Acid (95%-100%)	A	A	A	A	B	A	D	D	D	D	D	D	D	D	D	D
Silicone			A	A	A		A	A	A	A	A	A			Sulfurous Acid	A	A	A	A	B	A	D	C	B	B	C	B	B	B	B	C
Silver Bromide	A	A	A		D	A	B	A	A	A	A				Syrup		A	A	A	A		A	A	A	A	A	A	A	A	A	
Silver Nitrate	A	A	A	A	A	D	A	A	A	A	C	A			Tallow		A	A	A	A		A	A	A	A	A	A	A	A	A	C
Soap Solutions			A	A	A	A	A	A	A	A	A	B	A	B	Tannic Acid	A	A	A	A	A	B	A	C	D	**	A	B	A	A	C	
Soda Ash (See Sodium Carbonate)			A	A	A	A	A	A	A	A	A				Tanning Liquors		A	A	A	A		C	B	A	A	A	A	A	A	A	
Sodium Acetate	A	A	A	A	B	A	B	A	A	A	A				Tetrachlorethane		A	A	A	A		A	A	A	A	A	C	D	A	A	
Sodium Aluminate			A	A	A	A	A	A	A	A	A				Tetrahydrofuran		C	A	A	A	D	A	A	A	A	D	B	B	B	D	
Sodium Bicarbonate			A	A	A	A	A	A	A	A	A	B	A	B	Toluene, Toluol	B	A	A	A	A	††	A	A	A	A	A	D	D	D	D	
Sodium Bisulfate	A	A	A	A	A	D	A	A	B	B	B	A	B	A	Tomato Juice		A	A	A	A		A	A	A	A	A	D	D	B	A	
Sodium Bisulfite			A	A	A	A	C	A	A	A	A	B	A	B	Trichlorethane		A	A	A	A		A	A	A	A	A	D	D	A	A	
Sodium Carbonate	A	A	A	A	A	D	A	A	D	A	A	B	A	B	Trichlorethylene	D	A	A	A	D	B	A	A	A	A	C	D	A	A	A	
Sodium Chlorate			A	A	A	A	D	A	B	B	A	A	B	A	Trichloropropane		A	A	A	A		A	A	A	A	A	D	A	A	A	
Sodium Chloride	A	A	A	A	A	D	A	B	B	A	A	B	A	B	Tricresylphosphate		A	A	A	A		A	A	A	A	A	D	A	A	A	
Sodium Chromate			C	A	A	A	A	A	A	A	A	A			Triethylamine		A	A	A	A		A	A	A	A	A	A	A	A	A	
Sodium Cyanide	A	A	A	A	A	D	A	A	D	A	A	A			Turpentine	A	A	A	A	††	B	A	A	A	A	A	D	C	A	D	
Sodium Hydroxide (20%)	A	A	A	A	A		A	A	A	A	A	B	A	B	Urine		A	A	A	A		A	A	A	A	A	A	A	A	A	
Sodium Hydroxide (50% Solution)	C	A			A	C		B	D		B	A	B		Vegetable Juice		A	A	A	A		A	A	A	A	A	A	A	A	A	
Sodium Hydroxide (80% Solution)	C	A			A	D		D		C	B	C		Vinegar		A	A	A	A	D	C	A	C	B	A	B	A	A	B		
Sodium Hypochlorite (to 20%)	B	A	A	A	A	D	C	C	**	B	C	A			Water, Acid, Mine		A	A	A	A	D	A	A	A	A	A	B	A	B		
Sodium Metaphosphate			A	A	A	*	C	A	A	A	A	A			Water, Distilled, Lab Grade 7		A	A	A	A	D	A	A	A	A	A	A	A	A	B	
Sodium Metasilicate			A	A	A		A	A	A	A	A	A			Water, Fresh		A	A	A	A		A	A	A	A	A	A	A	A	A	
Sodium Nitrate	A	A	A	A	A	C	A	B	A	C	A	B	A	A	Water, Salt		A	A	A	A	C	C	A	C	A	A	A	A	A	A	
Sodium Perborate	A	A	A	A	A	D	C	A	**	A	A	A			Weed Killers		A	A	A	A		A	A	A	A	B	A	A	A	A	
Sodium Peroxide	A	A	A	A		D	A	A	A	C	A	A			Whey		A	A	A	A		A	A	A	A	A	A	A	A	A	
Sodium Polyphosphate (Mono, Di, Tribasic)	A	A	A	A		A	B	B	A	B	A	A			Whiskey and Wines	A	A	A	A	A	B	A	A	B	A	A	C	A	B		
Sodium Silicate	A	A	A	A	A	B	A	B	D	A	A	B	A	A	White Liquor (Pulp Mill)		A	A	A	A		A	A	A	A	A	A	A	A	A	
Sodium Sulphate	A	A	A	A	A	B	A	B	A	A	A	A			White Water (Paper Mill)		A	A	A	A		A	A	A	A	A	A	A	A	A	
Sodium Sulfide	A	A	A	A	A	D	C	B	D	A	A	B	A		Xylene	D	A	A	A	A	°	A	A	A	A	D	D	D	A	D	
Sodium Tetraborate			A	A	A		A	A	A	A	A	A			Zinc Chloride	A	A	A	A	A		D	D	C	D	A	A	B	A		
Sodium Thiosulphate ("Hypo")	A	A	A	A	A	B	A	A	D	B	A	A			Zinc Hydrosulphite		A	A	A	A		A	A	A	A	A	A	A	A		
Sorghum			A												Zinc Sulfate	A	A	A	A		D	B	A	A	A	A	A	A	A		
Soy Sauce			A																												

A — No effect—Excellent  
 B — Minor effect—Good  
 C — Moderate effect—Fair, contact Angar  
 D — Severe effect—Not recommended  
 X — Carbon/Ceramic Seal

† — P.V.C.—Satisfactory to 72° F  
 ° — Polypropylene—Satisfactory to 72° F  
 †† — Polypropylene—Satisfactory to 120° F  
 °° — BUNA N—Satisfactory for Seal & O-Rings



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