



VALVE CHEMICAL COMPATIBILITY CHART 3

GUIDE TO COLOUR CODING:

	Exceptional compatibility.
	Satisfactory to good compatibility with insignificant effect, minimal marking or corrosion.
	Poor compatibility with moderate effect, possibly softening and swelling, loss of strength - not recommended.
	Not recommended for any use.
	No information.

CHEMICAL	ABS	CPVC	LDPE	POLYPROPYLENE	PVC	PVDF (KRYNAR®)	BRASS	BRONZE	CARBON STEEL	CAST IRON
Acetaldehyde	Not recommended	Not recommended	Exceptional	Exceptional	Not recommended	Not recommended	Exceptional	Exceptional	Exceptional	Exceptional
Acetamide	Exceptional	Exceptional	Exceptional	Exceptional	Not recommended	Exceptional	Not recommended	Exceptional	Exceptional	Not recommended
Acetate Solvent	Exceptional	Exceptional	Exceptional	Exceptional	Not recommended	Exceptional	Not recommended	Exceptional	Exceptional	Exceptional
Acetic Acid	Not recommended	Exceptional	Exceptional	Exceptional	Not recommended	Exceptional	Not recommended	Exceptional	Exceptional	Not recommended
Acetic Acid 20%	Exceptional	Exceptional	Exceptional	Exceptional	Not recommended	Exceptional	Not recommended	Exceptional	Exceptional	Exceptional
Acetic Acid 80%	Not recommended	Exceptional	Not recommended	Exceptional	Not recommended	Exceptional	Not recommended	Exceptional	Exceptional	Not recommended
Acetic Acid, Glacial	Not recommended	Exceptional	Not recommended	Exceptional	Not recommended	Exceptional	Not recommended	Exceptional	Exceptional	Not recommended
Acetic Anhydride	Exceptional	Not recommended	Exceptional	Exceptional	Not recommended	Exceptional	Not recommended	Exceptional	Exceptional	Not recommended
Acetone	Not recommended	Not recommended	Exceptional	Exceptional	Not recommended	Not recommended	Exceptional	Exceptional	Exceptional	Exceptional
Acetyl Bromide	Exceptional	Exceptional	Not recommended	Exceptional	Not recommended	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional
Acetyl Chloride (dry)	Not recommended	Exceptional	Not recommended	Not recommended	Exceptional	Exceptional	Not recommended	Exceptional	Not recommended	Exceptional
Acetylene	Exceptional	Exceptional	Not recommended	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional
Acrylonitrile	Not recommended	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional
Adipic Acid	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional
Alcohols:Amyl	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional
Alcohols:Benzyl	Not recommended	Exceptional	Not recommended	Exceptional	Not recommended	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional
Alcohols:Butyl	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional
Alcohols:Diacetone	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional
Alcohols:Ethyl	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional
Alcohols:Hexyl	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional
Alcohols:Isobutyl	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional
Alcohols:Isopropyl	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional
Alcohols:Methyl	Not recommended	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional
Alcohols:Octyl	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional
Alcohols:Propyl	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional
Aluminum Chloride	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Not recommended	Not recommended	Exceptional	Not recommended
Aluminum Chloride 20%	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Not recommended	Not recommended	Exceptional	Not recommended
Aluminum Fluoride	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional
Aluminum Hydroxide	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional
Aluminum Nitrate	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Not recommended	Exceptional
Aluminum Potassium Sulfate 10%	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Not recommended
Aluminum Potassium Sulfate 100%	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Not recommended
Aluminum Sulfate	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Not recommended
Alums	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Not recommended
Amines	Exceptional	Not recommended	Exceptional	Exceptional	Not recommended	Exceptional	Exceptional	Not recommended	Exceptional	Not recommended
Ammonia 10%	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional
Ammonia Nitrate	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional
Ammonia, anhydrous	Not recommended	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Not recommended	Not recommended	Exceptional	Exceptional
Ammonia, liquid	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Not recommended	Not recommended	Exceptional	Exceptional
Ammonium Acetate	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Not recommended	Not recommended	Exceptional	Exceptional
Ammonium Bifluoride	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Not recommended	Not recommended	Exceptional	Not recommended
Ammonium Carbonate	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Not recommended	Not recommended	Exceptional	Exceptional
Ammonium Caseinate	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Not recommended	Not recommended	Exceptional	Exceptional
Ammonium Chloride	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Not recommended	Not recommended	Exceptional	Not recommended
Ammonium Hydroxide	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Not recommended	Not recommended	Exceptional	Exceptional
Ammonium Nitrate	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Not recommended	Not recommended	Exceptional	Exceptional
Ammonium Oxalate	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Not recommended	Not recommended	Exceptional	Exceptional
Ammonium Persulfate	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Not recommended	Not recommended	Exceptional	Exceptional
Ammonium Phosphate, Dibasic	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Not recommended	Exceptional	Not recommended

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	Exceptional compatibility.
	Satisfactory to good compatibility with insignificant effect, minimal marking or corrosion.
	Poor compatibility with moderate effect, possibly softening and swelling, loss of strength - not recommended.
	Not recommended for any use.
	No information.

CHEMICAL	ABS	CPVC	LDPE	POLYPROPYLENE	PVC	PVDF (KRYNAR®)	BRASS	BRONZE	CARBON STEEL	CAST IRON
Ammonium Phosphate, Monobasic										
Ammonium Phosphate, Tribasic										
Ammonium Sulfate										
Ammonium Sulfite										
Ammonium Thiosulfate										
Amyl Acetate										
Amyl Alcohol										
Amyl Chloride										
Aniline										
Aniline Hydrochloride										
Antifreeze										
Antimony Trichloride										
Aqua Regia (80% HCl, 20% HNO3)										
Arochlor 1248										
Aromatic Hydrocarbons										
Arsenic Acid										
Arsenic Salts										
Asphalt										
Barium Carbonate										
Barium Chloride										
Barium Cyanide										
Barium Hydroxide										
Barium Nitrate										
Barium Sulfate										
Barium Sulfide										
Beer										
Beet Sugar Liquids										
Benzaldehyde										
Benzene										
Benzene Sulfonic Acid										
Benzoic Acid										
Benzol										
Benzonitrile										
Benzyl Chloride										
Bleaching Liquors										
Borax (Sodium Borate)										
Boric Acid										
Brewery Slop										
Bromine										
Butadiene										
Butane										
Butanol (Butyl Alcohol)										
Butter										
Buttermilk										
Butyl Amine										
Butyl Ether										
Butyl Phthalate										
Butylacetate										
Butylene										

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	Poor compatibility with moderate effect, possibly softening and swelling, loss of strength - not recommended.
	Not recommended for any use.
	No information.

CHEMICAL	ABS	CPVC	LDPE	POLYPROPYLENE	PVC	PVDF (KYNAR®)	BRASS	BRONZE	CARBON STEEL	CAST IRON
Butyric Acid	Not recommended	Not recommended	Not recommended	Satisfactory	Satisfactory	Exceptional		Not recommended	Not recommended	Not recommended
Calcium Bisulfate								Poor		Not recommended
Calcium Bisulfide								Poor		
Calcium Bisulfite								Poor		
Calcium Carbonate								Exceptional	Poor	
Calcium Chlorate								Exceptional		
Calcium Chloride	Satisfactory							Exceptional	Not recommended	Poor
Calcium Hydroxide	Not recommended							Not recommended	Not recommended	Exceptional
Calcium Hypochlorite								Not recommended	Not recommended	Not recommended
Calcium Nitrate	Exceptional							Satisfactory	Not recommended	Satisfactory
Calcium Oxide	Not recommended							Not recommended		
Calcium Sulfate	Poor							Exceptional		Exceptional
Calgon								Poor		Not recommended
Cane Juice								Exceptional		Exceptional
Carbolic Acid (Phenol)	Not recommended	Satisfactory	Not recommended	Satisfactory	Not recommended		Not recommended	Satisfactory	Poor	Not recommended
Carbon Bisulfide		Not recommended		Not recommended	Not recommended			Satisfactory		
Carbon Dioxide (dry)	Satisfactory						Satisfactory	Exceptional	Not recommended	Not recommended
Carbon Dioxide (wet)	Satisfactory							Exceptional	Not recommended	Not recommended
Carbon Disulfide		Not recommended	Poor	Not recommended	Not recommended	Satisfactory		Not recommended	Poor	Exceptional
Carbon Monoxide						Satisfactory		Exceptional	Satisfactory	Not recommended
Carbon Tetrachloride	Not recommended	Not recommended	Not recommended	Not recommended	Not recommended		Exceptional	Satisfactory	Not recommended	Not recommended
Carbon Tetrachloride (dry)	Not recommended	Not recommended	Not recommended	Not recommended	Not recommended		Exceptional	Satisfactory	Not recommended	Not recommended
Carbon Tetrachloride (wet)	Not recommended	Not recommended	Not recommended	Not recommended	Not recommended		Satisfactory	Exceptional		Poor
Carbonated Water							Not recommended	Exceptional		Not recommended
Carbonic Acid							Not recommended	Satisfactory	Not recommended	Not recommended
Catsup	Satisfactory							Exceptional		Not recommended
Caustic Soda / Sodium Hydroxide (20%)	Satisfactory		Not recommended				Satisfactory	Satisfactory	Poor	Exceptional
Caustic Soda / Sodium Hydroxide (50%)	Exceptional		Not recommended				Not recommended	Poor	Poor	Not recommended
Caustic Soda / Sodium Hydroxide (80%)	Exceptional		Not recommended				Not recommended	Poor	Poor	Not recommended
Chloric Acid							Not recommended	Not recommended	Not recommended	Not recommended
Chlorinated Glue								Exceptional		Not recommended
Chlorine (dry)		Not recommended	Not recommended	Not recommended	Not recommended	Exceptional	Not recommended	Satisfactory	Not recommended	Not recommended
Chlorine Water		Exceptional	Satisfactory	Not recommended	Exceptional	Exceptional	Not recommended	Satisfactory	Not recommended	Not recommended
Chlorine, Anhydrous Liquid		Not recommended	Not recommended	Not recommended	Not recommended	Exceptional	Not recommended	Poor	Not recommended	Not recommended
Chloroacetic Acid		Not recommended	Not recommended	Poor	Satisfactory	Exceptional	Not recommended	Poor	Not recommended	Not recommended
Chlorobenzene (Mono)	Not recommended	Not recommended	Poor	Not recommended	Not recommended	Exceptional	Satisfactory	Poor	Not recommended	Satisfactory
Chlorobromomethane				Exceptional	Not recommended			Not recommended	Not recommended	Satisfactory
Chloroform	Not recommended	Not recommended	Poor	Not recommended	Not recommended	Exceptional	Satisfactory	Satisfactory	Not recommended	Satisfactory
Chlorosulfonic Acid		Not recommended	Not recommended	Not recommended	Not recommended	Not recommended	Satisfactory	Not recommended	Not recommended	Not recommended
Chocolate Syrup				Exceptional						Not recommended
Chromic Acid 10%	Satisfactory		Not recommended	Not recommended	Exceptional	Exceptional	Not recommended	Not recommended	Not recommended	Not recommended
Chromic Acid 30%	Satisfactory		Not recommended	Not recommended	Exceptional	Exceptional	Not recommended	Not recommended	Not recommended	Not recommended
Chromic Acid 5%	Satisfactory		Not recommended	Not recommended	Exceptional	Exceptional	Not recommended	Satisfactory	Not recommended	Not recommended
Chromic Acid 50%	Not recommended	Not recommended	Not recommended	Not recommended	Not recommended	Exceptional	Not recommended	Not recommended	Not recommended	Not recommended
Chromium Salts			Satisfactory		Exceptional					
Cider			Satisfactory	Exceptional	Exceptional			Exceptional		Not recommended
Citric Acid	Not recommended	Satisfactory	Not recommended	Exceptional	Satisfactory	Exceptional	Not recommended	Not recommended	Not recommended	Not recommended
Citric Oils				Exceptional	Exceptional	Exceptional		Exceptional		Not recommended
Cloroxr (Bleach)	Satisfactory	Exceptional		Not recommended	Exceptional	Exceptional		Poor		Not recommended

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	Poor compatibility with moderate effect, possibly softening and swelling, loss of strength - not recommended.
	Not recommended for any use.
	No information.

CHEMICAL	ABS	CPVC	LDPE	POLYPROPYLENE	PVC	PVDF (KYNAR®)	BRASS	BRONZE	CARBON STEEL	CAST IRON
Coffee	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Grey	Blue
Copper Chloride	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Red	Red
Copper Cyanide	Blue	Blue	Yellow	Blue	Blue	Blue	Red	Red	Red	Blue
Copper Fluoborate	Blue	Blue	Blue	Blue	Blue	Blue	Red	Red	Red	Red
Copper Nitrate	Blue	Blue	Yellow	Blue	Blue	Blue	Red	Red	Red	Red
Copper Sulfate >5%	Blue	Blue	Blue	Blue	Blue	Blue	Red	Red	Red	Red
Copper Sulfate 5%	Blue	Blue	Blue	Blue	Blue	Blue	Red	Yellow	Red	Red
Cream	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Red	Red
Cresols	Red	Red	Grey	Red	Red	Blue	Blue	Blue	Blue	Grey
Cresylic Acid	Blue	Red	Yellow	Blue	Red	Yellow	Red	Red	Blue	Blue
Cupric Acid	Blue	Blue	Yellow	Blue	Blue	Blue	Blue	Blue	Blue	Blue
Cyanic Acid	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Red
Cyclohexane	Blue	Red	Yellow	Red	Red	Blue	Blue	Yellow	Blue	Yellow
Cyclohexanone	Red	Red	Red	Red	Red	Red	Blue	Yellow	Blue	Yellow
Detergents	Yellow	Blue	Blue	Blue	Blue	Blue	Blue	Yellow	Blue	Blue
Diacetone Alcohol	Blue	Red	Blue	Blue	Red	Red	Blue	Yellow	Blue	Blue
Dichlorobenzene	Red	Red	Blue	Grey	Red	Blue	Blue	Yellow	Yellow	Blue
Dichloroethane	Red	Red	Grey	Red	Red	Blue	Yellow	Red	Red	Blue
Diesel Fuel	Blue	Blue	Grey	Blue	Blue	Blue	Blue	Blue	Blue	Blue
Diethyl Ether	Red	Red	Blue	Blue	Red	Blue	Yellow	Blue	Grey	Blue
Diethylamine	Red	Red	Red	Blue	Red	Red	Blue	Blue	Yellow	Yellow
Diethylene Glycol	Yellow	Blue	Yellow	Blue	Grey	Blue	Blue	Blue	Blue	Blue
Dimethyl Aniline	Red	Red	Blue	Red	Red	Blue	Blue	Blue	Blue	Blue
Dimethyl Formamide	Red	Red	Blue	Blue	Red	Red	Blue	Blue	Red	Blue
Diphenyl	Blue	Blue	Blue	Red	Red	Blue	Yellow	Yellow	Blue	Blue
Diphenyl Oxide	Blue	Blue	Blue	Red	Red	Yellow	Blue	Blue	Blue	Blue
Dyes	Blue	Blue	Blue	Blue	Yellow	Blue	Blue	Blue	Blue	Blue
Epsom Salts (Magnesium Sulfate)	Yellow	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue
Ethane	Blue	Blue	Blue	Red	Blue	Blue	Blue	Blue	Blue	Blue
Ethanol	Yellow	Yellow	Yellow	Blue	Grey	Blue	Blue	Blue	Grey	Yellow
Ethanolamine	Blue	Blue	Blue	Red	Red	Grey	Blue	Yellow	Grey	Blue
Ether	Red	Red	Red	Blue	Red	Yellow	Yellow	Blue	Red	Grey
Ethyl Acetate	Red	Red	Blue	Blue	Red	Red	Yellow	Blue	Grey	Blue
Ethyl Benzoate	Red	Red	Grey	Yellow	Red	Red	Blue	Blue	Blue	Blue
Ethyl Chloride	Red	Red	Grey	Red	Red	Blue	Blue	Blue	Blue	Grey
Ethyl Ether	Red	Red	Red	Red	Red	Blue	Yellow	Blue	Yellow	Grey
Ethyl Sulfate	Red	Red	Red	Red	Red	Blue	Red	Red	Red	Red
Ethylene Bromide	Red	Red	Red	Red	Red	Blue	Blue	Yellow	Red	Red
Ethylene Chloride	Red	Red	Red	Grey	Red	Blue	Blue	Blue	Red	Red
Ethylene Chlorohydrin	Red	Red	Red	Red	Red	Blue	Yellow	Yellow	Red	Red
Ethylene Diamine	Red	Red	Blue	Blue	Red	Yellow	Red	Yellow	Red	Red
Ethylene Dichloride	Red	Red	Red	Red	Red	Blue	Yellow	Grey	Grey	Blue
Ethylene Glycol / Glycol	Blue	Blue	Blue	Blue	Blue	Blue	Yellow	Blue	Grey	Blue
Ethylene Oxide	Red	Grey	Blue	Red	Red	Blue	Red	Grey	Red	Red
Fatty Acids	Blue	Blue	Red	Blue	Blue	Blue	Grey	Blue	Red	Grey
Ferric Chloride	Blue	Blue	Blue	Blue	Blue	Blue	Red	Red	Red	Red
Ferric Nitrate	Blue	Blue	Blue	Blue	Blue	Blue	Red	Grey	Red	Red
Ferric Sulfate	Blue	Blue	Blue	Blue	Blue	Blue	Red	Grey	Red	Red
Ferrous Chloride	Blue	Blue	Blue	Blue	Blue	Blue	Red	Grey	Red	Red

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	Satisfactory to good compatibility with insignificant effect, minimal marking or corrosion.
	Poor compatibility with moderate effect, possibly softening and swelling, loss of strength - not recommended.
	Not recommended for any use.
	No information.

CHEMICAL	ABS	CPVC	LDPE	POLYPROPYLENE	PVC	PVDF (KYNAR®)	BRASS	BRONZE	CARBON STEEL	CAST IRON
Ferrous Sulfate	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Satisfactory	Satisfactory	Not recommended	Not recommended
Fluoboric Acid	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Satisfactory	Not recommended	Not recommended
Fluorine	Exceptional	Not recommended	Not recommended	Not recommended	Not recommended	Exceptional	Exceptional	Not recommended	Not recommended	Not recommended
Fluosilicic Acid	Exceptional	Exceptional	Exceptional	Exceptional	Not recommended	Exceptional	Satisfactory	Satisfactory	Not recommended	Not recommended
Formaldehyde 100%	Satisfactory	Exceptional	Satisfactory	No information	Exceptional	Exceptional	Satisfactory	Satisfactory	Exceptional	No information
Formaldehyde 40%	Exceptional	Exceptional	Not recommended	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Not recommended	Satisfactory
Formic Acid	Not recommended	Exceptional	Not recommended	Exceptional	Exceptional	Exceptional	Not recommended	No information	Not recommended	Not recommended
Freon 113	Exceptional	Satisfactory	Exceptional	Not recommended	Satisfactory	Satisfactory	Exceptional	Satisfactory	Not recommended	Not recommended
Freon 12	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Satisfactory	Satisfactory	Not recommended	Exceptional
Freon 22	Exceptional	Satisfactory	Exceptional	Satisfactory	Exceptional	Exceptional	Exceptional	Exceptional	Not recommended	Not recommended
Freon TF	Exceptional	Satisfactory	Exceptional	Not recommended	Satisfactory	Satisfactory	Exceptional	Exceptional	Not recommended	Exceptional
Freon 11	Not recommended	Exceptional	No information	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Not recommended	Not recommended
Fruit Juice	Satisfactory	Exceptional	Exceptional	Satisfactory	Exceptional	Exceptional	Not recommended	Exceptional	Not recommended	Not recommended
Fuel Oils	Not recommended	Exceptional	Satisfactory	Exceptional	Exceptional	Satisfactory	Satisfactory	Exceptional	Satisfactory	Exceptional
Furan Resin	Not recommended	Not recommended	Not recommended	Not recommended	Not recommended	Not recommended	Exceptional	Exceptional	Exceptional	Exceptional
Furfural	Not recommended	Not recommended	Not recommended	Not recommended	Not recommended	Satisfactory	Exceptional	Satisfactory	Exceptional	Satisfactory
Gallic Acid	Not recommended	No information	Exceptional	Exceptional	Satisfactory	Exceptional	Exceptional	Satisfactory	Not recommended	Not recommended
Gasoline (high-aromatic)	Not recommended	No information	Exceptional	Exceptional	Satisfactory	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional
Gasoline, leaded, ref.	Not recommended	Exceptional	Exceptional	Exceptional	Satisfactory	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional
Gasoline, unleaded	Not recommended	No information	Exceptional	Exceptional	Satisfactory	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional
Gelatin	Exceptional	Exceptional	Exceptional	Exceptional	Satisfactory	Exceptional	Not recommended	Exceptional	Not recommended	Exceptional
Glucose	Satisfactory	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Satisfactory	Exceptional
Glue, P.V.A.	Exceptional	Exceptional	Exceptional	Exceptional	No information	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional
Glycerin	No information	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Satisfactory	Exceptional	Satisfactory	Exceptional
Glycol / Ethylene Glycol	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Satisfactory	Exceptional	No information	Exceptional
Glycolic Acid	Satisfactory	Exceptional	Exceptional	Exceptional	Satisfactory	Satisfactory	Exceptional	Not recommended	Not recommended	Not recommended
Gold Monocyanide	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Not recommended
Grape Juice	Satisfactory	Exceptional	Satisfactory	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Not recommended
Grease	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional
Heptane	Not recommended	Exceptional	Satisfactory	No information	No information	Exceptional	Exceptional	Exceptional	Satisfactory	Exceptional
Hexane	Not recommended	Satisfactory	Not recommended	Satisfactory	Satisfactory	Exceptional	Exceptional	Exceptional	Satisfactory	Exceptional
Honey	Exceptional	Exceptional	Satisfactory	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional
Hydraulic Oil (Petro)	Exceptional	Exceptional	No information	Not recommended	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional
Hydraulic Oil (Synthetic)	Exceptional	Exceptional	Exceptional	Not recommended	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional
Hydrazine	Exceptional	Not recommended	Exceptional	No information	Exceptional	Exceptional	Exceptional	Exceptional	Not recommended	Not recommended
Hydrobromic Acid 100%	Satisfactory	Exceptional	Satisfactory	No information	Exceptional	Exceptional	Not recommended	Exceptional	Not recommended	Not recommended
Hydrobromic Acid 20%	Exceptional	Exceptional	Satisfactory	Exceptional	Exceptional	Exceptional	Not recommended	Exceptional	Not recommended	Not recommended
Hydrochloric Acid 100%	Exceptional	Exceptional	Exceptional	Satisfactory	Not recommended	Exceptional	Not recommended	Not recommended	Not recommended	Not recommended
Hydrochloric Acid 20%	Exceptional	Exceptional	Exceptional	Satisfactory	Satisfactory	Exceptional	Not recommended	Not recommended	Not recommended	Not recommended
Hydrochloric Acid 37%	Exceptional	Exceptional	Satisfactory	No information	Satisfactory	Exceptional	Not recommended	Not recommended	Not recommended	Not recommended
Hydrochloric Acid, Dry Gas	Exceptional	Exceptional	Exceptional	Satisfactory	Exceptional	Exceptional	Not recommended	Exceptional	Not recommended	Not recommended
Hydrocyanic Acid	Satisfactory	Exceptional	Exceptional	Exceptional	Satisfactory	Exceptional	Not recommended	Exceptional	No information	Not recommended
Hydrocyanic Acid (Gas 10%)	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional	Exceptional
Hydrofluoric Acid 100%	Not recommended	No information	Exceptional	No information	No information	Exceptional	Exceptional	Satisfactory	Not recommended	Not recommended
Hydrofluoric Acid 20%	No information	No information	Exceptional	Exceptional	Satisfactory	Exceptional	Exceptional	Satisfactory	Not recommended	Not recommended
Hydrofluoric Acid 50%	No information	No information	Exceptional	Exceptional	Satisfactory	Exceptional	Exceptional	Satisfactory	Not recommended	Not recommended
Hydrofluoric Acid 75%	No information	No information	Exceptional	Exceptional	No information	Exceptional	Exceptional	Satisfactory	Not recommended	Not recommended
Hydrofluosilicic Acid 100%	Exceptional	Exceptional	Satisfactory	Exceptional	Satisfactory	Exceptional	Exceptional	Satisfactory	Not recommended	Not recommended
Hydrofluosilicic Acid 20%	Exceptional	Exceptional	Satisfactory	Exceptional	Exceptional	Exceptional	Exceptional	Satisfactory	Satisfactory	Satisfactory

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	Not recommended for any use.
	No information.

CHEMICAL	ABS	CPVC	LDPE	POLYPROPYLENE	PVC	PVDF (KRYNAR®)	BRASS	BRONZE	CARBON STEEL	CAST IRON
Hydrogen Gas	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Yellow	Grey
Hydrogen Peroxide 10%	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Yellow	Grey
Hydrogen Peroxide 100%	Blue	Blue	Grey	Yellow	Blue	Blue	Red	Blue	Red	Yellow
Hydrogen Peroxide 30%	Blue	Blue	Grey	Yellow	Blue	Blue	Blue	Blue	Yellow	Yellow
Hydrogen Peroxide 50%	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Yellow	Yellow
Hydrogen Sulfide (aqua)	Yellow	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Red
Hydrogen Sulfide (dry)	Blue	Blue	Blue	Blue	Blue	Blue	Red	Blue	Yellow	Red
Hydroquinone	Red	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Grey	Red
Hydroxyacetic Acid 70%	Blue	Blue	Blue	Blue	Red	Blue	Blue	Blue	Blue	Yellow
Ink	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Red	Red
Iodine	Red	Red	Blue	Grey	Blue	Blue	Blue	Blue	Blue	Red
Iodine (in alcohol)	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Red
Iodoform	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Red
Isooctane	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Red
Isopropyl Acetate	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Red
Isopropyl Ether	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Red
Isotane	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Red
Jet Fuel (JP3, JP4, JP5)	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Red
Kerosene	Red	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Red
Ketones	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Red
Lacquer Thinners	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Red
Lacquers	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Red
Lactic Acid	Red	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Red
Lard	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Red
Latex	Yellow	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Red
Lead Acetate	Yellow	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Red
Lead Nitrate	Yellow	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Red
Lead Sulfamate	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Red
Ligroin	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Red
Lime	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Red
Linoleic Acid	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Red
Lithium Chloride	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Red
Lithium Hydroxide	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Red
Lubricants	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Red
Lye: Ca(OH)2 Calcium Hydroxide	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Red
Lye: KOH Potassium Hydroxide	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Red
Lye: NaOH Sodium Hydroxide	Grey	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Red
Magnesium Bisulfate	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Red
Magnesium Carbonate	Yellow	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Red
Magnesium Chloride	Yellow	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Red
Magnesium Hydroxide	Yellow	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Red
Magnesium Nitrate	Yellow	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Red
Magnesium Oxide	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Red
Magnesium Sulfate (Epsom Salts)	Yellow	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Red
Maleic Acid	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Red
Maleic Anhydride	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Red
Malic Acid	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Red
Manganese Sulfate	Yellow	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Red
Mash	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Red

VALVE CHEMICAL COMPATIBILITY CHART

GUIDE TO COLOUR CODING:

	Exceptional compatibility.
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	Poor compatibility with moderate effect, possibly softening and swelling, loss of strength - not recommended.
	Not recommended for any use.
	No information.

CHEMICAL	ABS	CPVC	LDPE	POLYPROPYLENE	PVC	PVDF (KRYNAR®)	BRASS	BRONZE	CARBON STEEL	CAST IRON
Mayonnaise										
Melamine										
Mercuric Chloride (dilute)										
Mercuric Cyanide										
Mercurous Nitrate										
Mercury										
Methane										
Methanol (Methyl Alcohol)										
Methyl Acetate										
Methyl Acetone										
Methyl Acrylate										
Methyl Alcohol 10%										
Methyl Bromide										
Methyl Butyl Ketone										
Methyl Cellosolve										
Methyl Chloride										
Methyl Dichloride										
Methyl Ethyl Ketone										
Methyl Ethyl Ketone Peroxide										
Methyl Isobutyl Ketone										
Methyl Isopropyl Ketone										
Methyl Methacrylate										
Methylamine										
Methylene Chloride										
Milk										
Mineral Spirits										
Molasses										
Monochloroacetic acid										
Monoethanolamine										
Morpholine										
Motor oil										
Mustard										
Naphtha										
Naphthalene										
Natural Gas										
Nickel Chloride										
Nickel Nitrate										
Nickel Sulfate										
Nitrating Acid (<15% HNO3)										
Nitrating Acid (>15% H2SO4)										
Nitrating Acid (S1% Acid)										
Nitrating Acid (S15% H2SO4)										
Nitric Acid (20%)										
Nitric Acid (50%)										
Nitric Acid (5-10%)										
Nitric Acid (Concentrated)										
Nitrobenzene										
Nitrogen Fertilizer										
Nitromethane										

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CHEMICAL	ABS	CPVC	LDPE	POLYPROPYLENE	PVC	PVDF (KRYNAR®)	BRASS	BRONZE	CARBON STEEL	CAST IRON
Nitrous Acid	Not recommended	Exceptional		Exceptional	Exceptional	Satisfactory	Not recommended	Satisfactory		
Nitrous Oxide			Poor	Exceptional	Not recommended	Not recommended	Satisfactory	Exceptional	Satisfactory	
Oils:Aniline	Not recommended			Exceptional	Not recommended	Exceptional	Not recommended			Exceptional
Oils:Anise				Exceptional				Exceptional		Exceptional
Oils:Bay						Exceptional		Exceptional		Exceptional
Oils:Bone				Exceptional		Exceptional		Exceptional		Exceptional
Oils:Castor	Exceptional	Poor		Exceptional	Exceptional		Exceptional		Exceptional	Exceptional
Oils:Cinnamon			Not recommended	Not recommended	Not recommended					
Oils:Citric	Not recommended		Exceptional	Exceptional	Satisfactory	Exceptional	Satisfactory			Not recommended
Oils:Clove										
Oils:Coconut	Exceptional	Exceptional		Exceptional	Exceptional	Exceptional				Exceptional
Oils:Cod Liver	Exceptional	Exceptional		Exceptional	Exceptional	Exceptional				
Oils:Corne	Satisfactory		Exceptional	Exceptional	Satisfactory			Exceptional	Exceptional	Exceptional
Oils:Cottonseed	Exceptional	Exceptional		Exceptional	Satisfactory		Exceptional		Poor	Exceptional
Oils:Creosote			Poor	Poor			Exceptional			
Oils:Diesel Fuel (20, 30, 40, 50)			Exceptional	Exceptional	Satisfactory					Exceptional
Oils:Fuel (1, 2, 3, 5A, 5B, 6)	Not recommended		Satisfactory	Satisfactory	Exceptional	Satisfactory	Satisfactory			Exceptional
Oils:Ginger						Exceptional		Not recommended		
Oils:Hydraulic Oil (Petro)			Poor	Not recommended	Exceptional	Exceptional	Exceptional			Exceptional
Oils:Hydraulic Oil (Synthetic)			Exceptional	Not recommended	Exceptional	Exceptional	Exceptional			
Oils:Lemon	Poor					Exceptional		Exceptional		
Oils:Linseed		Poor	Exceptional	Exceptional	Exceptional	Exceptional	Satisfactory	Exceptional		
Oils:Mineral	Exceptional	Exceptional	Satisfactory	Exceptional	Satisfactory	Exceptional	Exceptional		Satisfactory	
Oils:Olive	Exceptional	Poor	Exceptional	Exceptional	Poor	Exceptional	Exceptional		Satisfactory	
Oils:Orange			Poor	Exceptional		Exceptional	Exceptional			
Oils:Palme	Exceptional	Exceptional		Exceptional	Exceptional	Exceptional	Exceptional			Exceptional
Oils:Peanut		Poor	Exceptional	Not recommended	Exceptional	Exceptional	Exceptional		Poor	Exceptional
Oils:Peppermint	Not recommended					Exceptional	Exceptional	Exceptional		
Oils:Pine	Not recommended	Exceptional	Not recommended	Satisfactory	Not recommended	Exceptional	Exceptional	Satisfactory	Poor	Poor
Oils:Rapeseed		Exceptional	Not recommended	Not recommended	Exceptional	Exceptional	Exceptional			Exceptional
Oils:Rosin			Satisfactory	Exceptional	Poor	Exceptional	Exceptional	Satisfactory		
Oils:Sesame Seed	Exceptional	Exceptional		Exceptional	Exceptional	Exceptional	Exceptional	Exceptional		Exceptional
Oils:Silicone	Exceptional	Exceptional		Exceptional	Exceptional	Exceptional	Exceptional	Exceptional		Exceptional
Oils:Soybean	Exceptional	Exceptional		Exceptional	Exceptional	Exceptional	Exceptional		Satisfactory	Exceptional
Oils:Sperm (whale)	Exceptional	Exceptional		Exceptional	Exceptional	Exceptional	Exceptional	Exceptional		Exceptional
Oils:Tanning						Exceptional	Exceptional	Exceptional		
Oils:Transformer		Exceptional	Poor	Satisfactory	Satisfactory	Exceptional	Exceptional		Poor	
Oils:Turbine		Exceptional	Poor	Satisfactory	Exceptional	Exceptional	Exceptional		Poor	Exceptional
Oleic Acid	Not recommended	Exceptional	Poor	Satisfactory	Poor	Exceptional	Not recommended	Satisfactory	Poor	
Oleum 100%	Not recommended	Not recommended	Not recommended	Not recommended	Not recommended	Not recommended	Not recommended	Not recommended	Not recommended	Not recommended
Oleum 25%	Not recommended	Not recommended	Not recommended	Not recommended	Not recommended	Poor	Not recommended	Not recommended	Not recommended	Not recommended
Oxalic Acid (cold)	Exceptional	Exceptional	Exceptional	Exceptional	Satisfactory	Satisfactory	Not recommended	Satisfactory	Not recommended	Poor
Ozone	Satisfactory	Exceptional	Poor	Satisfactory	Satisfactory	Exceptional	Exceptional	Satisfactory	Poor	
Palmitic Acid	Exceptional	Exceptional		Satisfactory	Satisfactory	Exceptional	Not recommended	Exceptional	Not recommended	
Paraffin	Exceptional	Exceptional	Satisfactory	Exceptional	Satisfactory	Exceptional	Exceptional	Satisfactory	Satisfactory	
Pentane			Not recommended	Not recommended	Exceptional	Exceptional		Poor	Satisfactory	
Perchloric Acid		Exceptional	Satisfactory	Poor	Poor	Exceptional	Exceptional	Satisfactory	Not recommended	
Perchloroethylene	Not recommended	Poor	Not recommended	Not recommended	Poor	Exceptional	Exceptional	Satisfactory	Poor	Exceptional
Petrolatum			Satisfactory	Not recommended	Satisfactory	Exceptional	Exceptional	Exceptional	Poor	



VALVE CHEMICAL COMPATIBILITY CHART

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CHEMICAL	ABS	CPVC	LDPE	POLYPROPYLENE	PVC	PVDF (KRYNAR®)	BRASS	BRONZE	CARBON STEEL	CAST IRON
Petroleum	Yellow	Blue	Grey	Yellow		Blue		Blue		
Phenol (10%)	Red	Blue	Yellow	Yellow	Grey	Blue		Yellow	Red	Red
Phenol (Carbolic Acid)	Red	Yellow	Red	Yellow	Red	Blue	Red	Yellow	Red	Red
Phosphoric Acid (>40%)	Grey		Yellow	Blue	Yellow	Blue	Red	Yellow	Red	Red
Phosphoric Acid (crude)	Grey			Yellow	Yellow	Blue		Yellow	Red	Red
Phosphoric Acid (molten)	Red			Red	Red	Red		Red	Red	Red
Phosphoric Acid (S40%)	Yellow	Blue	Blue	Blue	Yellow	Yellow	Red	Yellow	Red	Red
Phosphoric Acid Anhydride				Blue		Red			Red	
Phosphorus		Yellow	Yellow	Blue	Blue	Blue		Blue		
Phosphorus Trichloride	Red	Red	Yellow		Red	Blue				
Photographic Developer	Yellow	Blue	Blue	Blue	Blue		Blue	Blue		Red
Photographic Solutions		Blue	Blue	Blue	Blue	Yellow		Blue		
Phthalic Acid	Yellow	Yellow	Yellow	Blue		Blue		Yellow	Grey	
Phthalic Anhydride	Yellow	Red		Red	Red	Blue		Blue	Grey	
Picric Acid	Blue	Red	Blue	Yellow	Red	Blue		Yellow	Red	Blue
Antimony Plating 130°F		Blue		Blue	Blue	Blue		Blue		Blue
Arsenic Plating 110°F		Blue		Blue	Blue	Blue		Blue		Blue
Brass Plating: High-Speed Brass Bath 110°F		Blue	Yellow	Blue	Blue	Yellow				Blue
Brass Plating: Regular Brass Bath 100°F		Blue	Blue	Blue	Blue	Yellow		Blue		Blue
Bronze Plating: Cu-Cd Bronze Bath R.T.		Blue		Blue	Blue	Blue				Blue
Bronze Plating: Cu-Sn Bronze Bath 160°F		Red		Blue	Red	Blue				Blue
Bronze Plating: Cu-Zn Bronze Bath 100°F		Blue		Blue	Blue	Blue				Blue
Cadmium Plating: Cyanide Bath 90°F		Blue		Blue	Blue	Blue				Blue
Cadmium Plating: Fluoborate Bath 100°F		Blue		Blue	Blue	Blue				Red
Chromium Plating: Barrel Chrome Bath 95°F		Blue		Blue	Blue	Grey				Grey
Chromium Plating: Black Chrome Bath 115°F		Blue		Blue	Blue	Grey				Blue
Chromium Plating: Chromic-Sulfuric Bath 130°F		Blue		Blue	Blue	Grey				Blue
Chromium Plating: Fluoride Bath 130°F		Blue		Blue	Blue	Grey				Grey
Chromium Plating: Fluosilicate Bath 95°F		Blue		Red	Blue	Grey				Grey
Copper Plating (Acid): Copper Fluoborate Bath 120°F		Blue		Blue	Blue	Blue				Red
Copper Plating (Acid): Copper Sulfate Bath R.T.		Blue		Blue	Blue	Blue				Blue
Copper Plating (Cyanide): Copper Strike Bath 120°F		Blue		Blue	Blue	Yellow				Blue
Copper Plating (Cyanide): High-Speed Bath 180°F		Red		Blue	Red	Blue				Blue
Copper Plating (Cyanide): Rochelle Salt Bath 150°F		Red		Blue	Blue	Blue				Blue
Copper Plating (Misc): Copper (Electroless)		Blue		Blue	Blue	Blue				Blue
Copper Plating (Misc): Copper Pyrophosphate		Blue		Blue	Blue	Blue				Blue
Gold Plating: Acid 75°F		Blue		Blue	Blue	Blue				Blue
Gold Plating: Cyanide 150°F		Red		Blue	Red	Blue				Blue
Gold Plating: Neutral 75°F		Blue		Blue	Blue	Blue				Blue
Indium Sulfamate Plating R.T.		Blue		Blue	Blue	Blue				Blue
Iron Plating: Ferrous Am Sulfate Bath 150°F		Red		Blue	Red	Blue				Blue
Iron Plating: Ferrous Chloride Bath 190°F		Red		Grey	Blue	Blue				Blue
Iron Plating: Ferrous Sulfate Bath 150°F		Red		Blue	Red	Blue				Blue
Iron Plating: Fluoborate Bath 145°F		Red		Blue	Red	Blue				Blue
Iron Plating: Sulfamate 140°F		Blue		Blue	Blue	Blue				Blue
Iron Plating: Sulfate-Chloride Bath 160°F		Red		Blue	Red	Blue				Blue
Lead Fluoborate Plating		Blue		Blue	Blue	Blue				Blue
Nickel Plating: Electroless 200°F		Red		Red	Red	Blue				Blue
Nickel Plating: Fluoborate 100-170°F		Blue		Blue	Blue	Blue				Blue

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CHEMICAL	ABS	CPVC	LDPE	POLYPROPYLENE	PVC	PVDF (KRYNAR®)	BRASS	BRONZE	CARBON STEEL	CAST IRON
Nickel Plating: High-Chloride 130 - 160°F										
Nickel Plating: Sulfamate 100 - 140°F										
Nickel Plating: Watts Type 115 - 160°F										
Rhodium Plating 120°F										
Silver Plating 80 - 120°F										
Tin-Fluoborate Plating 100°F										
Tin-Lead Plating 100°F										
Zinc Plating: Acid Chloride 140°F										
Zinc Plating: Acid Fluoborate Bath R.T.										
Zinc Plating: Acid Sulfate Bath 150°F										
Zinc Plating: Alkaline Cyanide Bath R.T.										
Potash (Potassium Carbonate)										
Potassium Bicarbonate										
Potassium Bromide										
Potassium Chlorate										
Potassium Chloride										
Potassium Chromate										
Potassium Cyanide Solutions										
Potassium Dichromate										
Potassium Ferricyanide										
Potassium Ferrocyanide										
Potassium Hydroxide (Caustic Potash)										
Potassium Hypochlorite										
Potassium Iodide										
Potassium Nitrate										
Potassium Oxalate										
Potassium Permanganate										
Potassium Sulfate										
Potassium Sulfide										
Propane (liquefide)										
Propylene										
Propylene Glycol										
Pyridine										
Pyrogalllic Acid										
Resorcinal										
Rosins										
Rum										
Rust Inhibitors										
Salad Dressings										
Salicylic Acid										
Salt Brine (NaCl saturated)										
Sea Water										
Shellac (Bleached)										
Shellac (Orange)										
Silicone										
Silver Bromide										
Silver Nitrate										
Soap Solutions										
Soda Ash (see Sodium Carbonate)										



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CHEMICAL	ABS	CPVC	LDPE	POLYPROPYLENE	PVC	PVDF (KRYNAR®)	BRASS	BRONZE	CARBON STEEL	CAST IRON
Sodium Acetate	Yellow	Blue	Blue	Blue	Yellow	Blue	Yellow	Yellow	Grey	Yellow
Sodium Aluminate	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Grey	Blue
Sodium Benzoate	Blue	Blue	Blue	Blue	Blue	Blue	Red	Blue	Grey	Grey
Sodium Bicarbonate	Blue	Blue	Blue	Blue	Blue	Blue	Red	Blue	Red	Red
Sodium Bisulfate	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Yellow	Red	Red
Sodium Bisulfite	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Red	Red
Sodium Borate (Borax)	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Grey	Blue
Sodium Bromide	Yellow	Blue	Blue	Blue	Yellow	Blue	Blue	Blue	Red	Grey
Sodium Carbonate	Yellow	Blue	Yellow	Blue	Blue	Blue	Yellow	Blue	Yellow	Yellow
Sodium Chlorate	Blue	Blue	Yellow	Blue	Blue	Blue	Blue	Yellow	Grey	Blue
Sodium Chloride	Blue	Blue	Blue	Blue	Blue	Blue	Red	Yellow	Grey	Red
Sodium Chromate	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Yellow	Yellow	Blue
Sodium Cyanide	Blue	Blue	Blue	Blue	Blue	Blue	Red	Red	Yellow	Blue
Sodium Ferrocyanide	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Red	Blue
Sodium Fluoride	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Red	Grey
Sodium Hydrosulfite	Blue	Grey	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue
Sodium Hydroxide (20%) / Caustic Soda	Yellow	Blue	Red	Blue	Blue	Blue	Yellow	Yellow	Grey	Blue
Sodium Hydroxide (50%) / Caustic Soda	Blue	Blue	Red	Blue	Blue	Blue	Red	Grey	Grey	Red
Sodium Hydroxide (80%) / Caustic Soda	Blue	Blue	Red	Blue	Blue	Blue	Red	Grey	Grey	Red
Sodium Hypochlorite (<20%)	Yellow	Blue	Blue	Blue	Blue	Blue	Red	Grey	Red	Red
Sodium Hypochlorite (100%)	Blue	Grey	Yellow	Yellow	Yellow	Blue	Red	Grey	Red	Red
Sodium Hyposulfate	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Red	Red
Sodium Metaphosphate	Blue	Blue	Blue	Blue	Blue	Blue	Red	Blue	Yellow	Grey
Sodium Metasilicate	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Grey	Blue
Sodium Nitrate	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Yellow	Yellow	Yellow
Sodium Perborate	Blue	Blue	Blue	Blue	Blue	Blue	Red	Blue	Yellow	Grey
Sodium Peroxide	Blue	Blue	Blue	Yellow	Yellow	Blue	Red	Blue	Grey	Blue
Sodium Polyphosphate	Blue	Blue	Blue	Blue	Blue	Blue	Red	Yellow	Yellow	Red
Sodium Silicate	Blue	Blue	Blue	Blue	Blue	Blue	Red	Yellow	Yellow	Yellow
Sodium Sulfate	Blue	Blue	Blue	Blue	Blue	Blue	Yellow	Yellow	Yellow	Yellow
Sodium Sulfide	Blue	Blue	Blue	Blue	Blue	Blue	Red	Yellow	Yellow	Grey
Sodium Sulfite	Blue	Blue	Yellow	Blue	Blue	Blue	Red	Yellow	Blue	Blue
Sodium Tetraborate	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue
Sodium Thiosulfate (hypo)	Blue	Blue	Blue	Blue	Blue	Blue	Red	Blue	Yellow	Grey
Sorghum	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue
Soy Sauce	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Red
Stannic Chloride	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Red	Red
Stannic Fluoborate	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Red	Red
Stannous Chloride	Blue	Blue	Yellow	Blue	Blue	Blue	Blue	Blue	Red	Red
Starch	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Grey	Grey
Stearic Acid	Blue	Yellow	Yellow	Blue	Yellow	Blue	Red	Yellow	Grey	Grey
Stoddard Solvent	Yellow	Grey	Grey	Grey	Grey	Blue	Blue	Blue	Yellow	Blue
Styrene	Blue	Red	Blue	Blue	Red	Blue	Blue	Blue	Blue	Blue
Sugar (Liquids)	Yellow	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Yellow	Blue
Sulfate (Liquors)	Blue	Yellow	Blue	Blue	Yellow	Blue	Blue	Yellow	Blue	Grey
Sulfur Chloride	Blue	Grey	Grey	Grey	Grey	Blue	Red	Yellow	Red	Red
Sulfur Dioxide	Red	Blue	Yellow	Blue	Blue	Blue	Red	Yellow	Yellow	Blue
Sulfur Dioxide (dry)	Blue	Blue	Blue	Blue	Blue	Blue	Red	Yellow	Yellow	Blue
Sulfur Hexafluoride	Blue	Blue	Yellow	Blue	Yellow	Blue	Blue	Blue	Blue	Blue

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CHEMICAL	ABS	CPVC	LDPE	POLYPROPYLENE	PVC	PVDF (KRYNAR®)	BRASS	BRONZE	CARBON STEEL	CAST IRON
Sulfur Trioxide		00a0e3		cccccc	00a0e3		ff0000	cccccc		ffff00
Sulfur Trioxide (dry)				ff0000	00a0e3		00a0e3	ffff00		00a0e3
Sulfuric Acid (<10%)	ffff00	00a0e3	00a0e3	00a0e3	00a0e3			ffff00	ff0000	cccccc
Sulfuric Acid (10-75%)		00a0e3	00a0e3	00a0e3	00a0e3			ffff00	ff0000	ff0000
Sulfuric Acid (75-100%)		cccccc	ffff00	cccccc	ff0000	00a0e3		ffff00	ff0000	ff0000
Sulfuric Acid (cold concentrated)		ff0000	cccccc	00a0e3	ff0000	00a0e3		ffff00	ff0000	ff0000
Sulfuric Acid (hot concentrated)		ff0000	ff0000	ff0000	ff0000	cccccc		ffff00	ff0000	ff0000
Sulfurous Acid		00a0e3	ffff00	00a0e3	00a0e3	00a0e3		ffff00	ff0000	ff0000
Sulfuryl Chloride										
Tallow			cccccc	00a0e3						
Tannic Acid		00a0e3	ffff00	00a0e3	00a0e3	ffff00	ffff00	ffff00	cccccc	cccccc
Tanning Liquors		00a0e3	00a0e3	00a0e3	00a0e3			00a0e3		
Tartaric Acid		00a0e3	00a0e3	00a0e3	00a0e3	ffff00	ff0000	ffff00	ff0000	cccccc
Tetrachloroethane		cccccc		cccccc	cccccc	00a0e3				00a0e3
Tetrachloroethylene		ff0000	ffff00	ff0000	ff0000					00a0e3
Tetrahydrofuran		ff0000	cccccc	cccccc	ff0000	ffff00		00a0e3	00a0e3	
Tin Salts				00a0e3	00a0e3	00a0e3				
Toluene (Toluol)	ff0000	ff0000	cccccc	cccccc	ff0000		00a0e3			00a0e3
Tomato Juice	ffff00		00a0e3	00a0e3	00a0e3			00a0e3	cccccc	
Trichloroacetic Acid			00a0e3	00a0e3	ffff00	ffff00			ff0000	ff0000
Trichloroethane				cccccc	cccccc	00a0e3		00a0e3		ffff00
Trichloroethylene	ff0000	ff0000	ff0000	cccccc	ff0000	ffff00		ffff00	ffff00	cccccc
Trichloropropane	ff0000							00a0e3		00a0e3
Tricresylphosphate	ffff00	ff0000	ffff00	00a0e3	ff0000	ff0000		00a0e3		ffff00
Triethylamine		00a0e3		ff0000	ffff00	00a0e3				00a0e3
Trisodium Phosphate	ffff00	00a0e3	00a0e3	00a0e3	00a0e3	00a0e3		00a0e3	ff0000	
Turpentine	ff0000	00a0e3	ff0000	ff0000	ff0000	00a0e3	ff0000	00a0e3	ffff00	
Urea	ffff00	00a0e3	00a0e3	00a0e3	ff0000	00a0e3		ffff00		
Uric Acid			ffff00		00a0e3			ffff00		ff0000
Urine		00a0e3	00a0e3	00a0e3	00a0e3	00a0e3		00a0e3		00a0e3
Varnish			00a0e3	00a0e3	ff0000		00a0e3		cccccc	cccccc
Vegetable Juice	ffff00		00a0e3	00a0e3	00a0e3	00a0e3		00a0e3		ff0000
Vinegar	00a0e3	00a0e3	00a0e3	00a0e3	ffff00	ffff00	ff0000	00a0e3	ff0000	ff0000
Vinyl Acetate		ff0000	00a0e3	ffff00	ff0000	00a0e3				ffff00
Vinyl Chloride	ff0000	ff0000		00a0e3	ff0000	ffff00		00a0e3	ff0000	ffff00
Water, Acid, Mine	ffff00	00a0e3	00a0e3	00a0e3	ffff00	00a0e3	ff0000	00a0e3	ff0000	ff0000
Water, Deionized		00a0e3	00a0e3	00a0e3	00a0e3	00a0e3	00a0e3	00a0e3	ff0000	ff0000
Water, Distilled	ffff00	00a0e3	00a0e3	00a0e3	00a0e3	00a0e3	00a0e3	00a0e3	ff0000	ff0000
Water, Fresh	00a0e3	00a0e3	00a0e3	00a0e3	ffff00	00a0e3	ffff00	00a0e3	ff0000	ff0000
Water, Salt		00a0e3	00a0e3	00a0e3	00a0e3	00a0e3	ff0000	00a0e3	ff0000	ff0000
Weed Killers										
Whey										
Whiskey & Wines	cccccc	00a0e3	cccccc	00a0e3	00a0e3	00a0e3	ffff00	00a0e3	ff0000	ff0000
White Liquor (Pulp Mill)		00a0e3	00a0e3	00a0e3	00a0e3	00a0e3	ffff00	00a0e3		cccccc
White Water (Paper Mill)				00a0e3	00a0e3	00a0e3				00a0e3
Xylene	ff0000	ff0000	ffff00	ffff00	ff0000	00a0e3	00a0e3	ffff00	ffff00	ffff00
Zinc Chloride	00a0e3	00a0e3	00a0e3	00a0e3	ffff00	00a0e3	ff0000	ffff00	ff0000	ff0000
Zinc Hydrosulfite	00a0e3									ff0000
Zinc Sulfate	00a0e3	00a0e3	00a0e3	00a0e3	00a0e3	00a0e3	ffff00	ffff00	ff0000	ff0000

