



LabWaste™ CPVC Corrosive Waste Drainage Systems Chemical Resistance Information

LWCR-0115

CPVC is inert to most acids, bases, salts, plus a wide variety of organic compounds. Application conditions including chemical concentration and temperature must be taken into consideration. Due to the many variables involved, final suitability often must be based on in-service testing.

The following Chemical Resistance Table recommendations apply only to non-pressure, laboratory drainage applications, which are those characterized as the routine disposal of a wide variety of hot and cold chemicals in relatively small quantities accompanied by water for the purpose of dilution and flushing. For use of **LabWaste™** CPVC products in continuous or dedicated chemical waste drainage systems, chemical resistance data for pressure applications must be followed. Contact Spears® Technical Services for additional information.

In many cases compatibility or solubility data is not available. While specific data may not be available, please note that virtually all aqueous solutions of chemicals used in a laboratory can be safely used with proper dilution and flushing. This includes chemicals that readily disperse in water (such as many fat-soluble vitamins and oils) that can be flushed during disposal.

This information is compiled from commercially available industry sources. It is offered in good faith and believed to be accurate at the time of its preparation, but is offered without any warranty, expressed or implied, by information sources or Spears® Manufacturing Company. These recommendations are guidelines for use and the final decision regarding material suitability must rest with the end-user.

Noted Caution Areas for CPVC

- Disposed chemicals must be properly diluted. Chemicals that individually have no effect may have an effect when used in combination. Due to the wide variety of potential chemical concentrations and combinations, testing under actual service conditions is highly recommended.
- CPVC is not recommended for use with chlorinated solvents. Most solvents are prohibited by law from disposal in drainage systems.
- Chemicals that do not normally affect CPVC may cause cracking when excessive stress is applied. Tests under applied adverse stress conditions indicate that environmental stress cracking may occur when exposed to surfactants, certain oils, or grease. Such stresses include external stresses from expansion/contraction and installation. Special consideration should be taken during design and installation to avoid unusual stresses in the piping system.
- Chemical resistance of plastics tends to decrease with an increase in chemical concentration and/or temperature. As a result, various chemicals may be safely handled in limited concentrations or within certain temperature limits. Most all aqueous solutions of water-soluble chemical not specified in the Chemical Resistance Tables can be used in CPVC drainage systems.
- While **LabWaste™** CPVC products are suitable for many continuous commercial and industrial chemical waste applications, the following Chemical Resistance Tables should **NOT** be used for these applications. Consult chemical resistance data for CPVC pressure piping to determine suitability for continuous chemical waste drainage applications.

WARNING: Hazardous material (including certain solvents and high concentrations of certain acids), are typically not discharged into lab waste piping. Laboratories routinely have specialized collection equipment and contracted disposal services for waste considered “hazardous”. Proper laboratory protocols on handling materials identified by OSHA and EPA as “hazardous” must be established and followed. Such requirements typically specify special storage and disposal apart from drainage disposal via dilution or neutralization. Even improper handling and disposal of HAZARDOUS materials by accident are subject to heavy fines by Federal, State and Local Authorities.

Chemical Resistance Tables

Resistance Rating Codes

R = Recommended

C = Use with Caution.

N = Not Recommended.

--- = No data available

IMPORTANT NOTE: Chemical Resistance data is provided for material compatibility information purposes only and in no way addresses the legal discharge of chemicals into any waste system, some of which may be prohibited by law. Nor does the data address the compatibility of chemical mixtures, issues of hazardous decomposition, or other potentially dangerous circumstances that might be involved. Data is applicable to laboratory drainage systems only and may not be suitable for continuous service or pressure applications.

CHEMICAL	RATING	CHEMICAL	RATING	CHEMICAL	RATING
A					
Acacia, Gum Arabic	R	Arsenic Acid	R	Carbon Dioxide Wet	R
Acetaldehyde	R	Aryl Sulfonic Acid	R	Carbon Disulfide	C
Acetamide	R	Asorbic Acid	R	Carbon Monoxide	R
Acetic Acid Vapor 25%	R	L-Asparagine	R	Carbon Tetrachloride	N
Acetic Acid 60%	R	Asphalt	N	Carbonic Acid	R
Acetic Acid 85%	R	B		Castor Oil	C
Acetic Acid Glacial	R	Barium Acetate	R	Caustic Potash	R
Acetic Anhydride	R	Barium Carbonate	R	Caustic Soda	R
Acetone	R	Barium Chloride	R	Cellosolve	C
Acetophenone	C	Barium Hydroxide	R	Cellosolve Acetate	R
Acetyl Chloride	R	Barium Nitrate	R	Chloral Hydrate	R
Acetylene	N	Barium Sulfate	R	Chloramine	R
Acetylnitrile	R	Barium Sulfide	R	Chloric Acid	R
Acetylsalicylic acid, aspirin	R	Beer	R	Chloric Acid 20%	R
Acrylic Acid	R	Beer Sugar Liquors	R	Chlorine, Aqueous	R
Acrylonitrile	R	Benzaldehyde	R	Chlorinated Water 10 PPM	R
Adenine, 6-aminopurine	R	Benzene	C	Chlorinated Water Sat'd	R
Adenosine Triphosphate	R	Benzene Sulfonic Acid	R	Chloroacetic Acid	R
Adipic Acid	R	Benzoic Acid	R	Chloroacetyl Chloride	---
Agarose	R	Benzyl Alcohol	R	Chlorobenzene	N
Alizarin stain Mordant Red 11	R	Bismuth Carbonate	R	Chlorobenzyl Chloride	N
Alizarin Red S Mordant Red 3	R	Biuret	R	Chloroform	N
Alizarin Yellow R Mordant Orange 1	R	Black Liquor	R	Chlorophenol Red	R
Allyl Alcohol	R	Bleach 5%	R	Chloropicrin	---
Allyl Chloride	N	Bleach 12%	R	Chlorosulfonic Acid	R
Aluminum Acetate	R	Blood	R	Chromic Acid 10%	R
Aluminum Ammonium	R	Borax	R	Chromic Acid 30%	R
Aluminum Chloride	R	Boric Acid	R	Chromic Acid 40%	R
Aluminum Fluoride	R	Brake Fluid	---	Chromic Acid 50%	C
Aluminum Hydroxide	R	Brine	R	Chromium	R
Aluminum Nitrate	R	Brilliant Blue G-250	R	Chromium Tetroxide	R
Aluminum Oxochloride	R	Brilliant Blue R-250	R	Citric Acid	R
Aluminum Potassium	R	Brilliant Cresyl Blue	R	Clayton Yellow	R
Aluminum Potassium Sulfate, Alum	R	Brilliant Green	R	Coconut Oil	C
Aluminum Sulfate	R	Bromcresal Green	R	Coffee	R
Ammonia Anhydrous	R	Bromcresal purple	R	Congo Red solution	R
Ammonia Gas	R	Bromic Acid	R	Copper Acetate	R
Ammonia Liquid	R	Bromine Liquid	R	Copper Carbonate	R
Ammonia Acetate	R	Bromine Vapor	R	Copper Chloride	R
Ammonium Bicarbonate	R	Bromine Water	R	Copper Cyanide	R
Ammonium Bifluoride	R	Bromotoluene	---	Copper Fluoride	R
Ammonium Bisulfide	R	Bromophenol Blue	R	Copper Nitrate	R
Ammonium Bromide	R	Bromthymol Blue	R	Copper Sulfate	R
Ammonium Carbonate	R	Butadiene	R	Corn Oil	C
Ammonium Chloride	R	Butane	R	Corn Syrup	R
Ammonium Citrate	R	Butyl Acetate	C	Cottonseed Oil	C
Ammonium Dichromate	R	Butyl Alcohol	C	m-Cresal Purple	R
Ammonium Dihydrogen Phosphate	R	Butyl Cellosolve	R	Cresal Red	R
Ammonium Ferric Sulfate	R	n-Butyl Chloride	---	Creosote	N
Ammonium Ferrous Sulfate	R	Butylene (C)	---	Cresol	N
Ammonium Fluoride 10%	R	Butyl Phenol	C	Cresylic Acid	R
Ammonium Fluoride 25%	R	Butyl Phthalate	---	Croton Aldehyde	R
Ammonium Hydroxide 10% - 28%	R	Butyl Stearate	---	Crude Oil	R
Ammonium Hydroxide 100%	R	Butynediol	---	Cumene	C
Ammonium Iodide	R	Butyric Acid	R	Cupric Chloride	R
Ammonium Nitrate	R	C		Cupric Fluoride	R
Ammonium Persulfate	R	Cadium Cyanide	R	Cupric Nitrate	R
Ammonium Phosphate Monobasic/Dibasic	R	Calcium Acetate	R	Cupric Sulfate	R
Ammonium Sulfate	R	Calcium Bisulfide	R	Cuprous Chloride	R
Ammonium Sulfide	R	Calcium Bisulfate	R	Cyclohexane	R
Ammonium Sulfite	R	Calcium Carbonate	R	Cyclohexanol	R
Ammonium Thiocyanate	R	Calcium Chlorate	R	Cyclohexanone	R
Amyl Acetate	C	Calcium Chloride	R	D	
Amyl Alcohol 1%	R	Calcium Chloride	R	Decahydronaphthalene	R
Amyl Alcohol >1%	C	Calcium Fluoride	R	Detergents	R
n-Amyl Chloride	C	Calcium Hydroxide	R	Dextrin	R
Aniline	C	Calcium Hypochlorite	R	Dextrose	R
Aniline Chlorohydrate	C	Calcium Nitrate	R	Diacetone Alcohol	R
Aniline Hydrochloride	C	Calcium Oxide	R	Diastase of malt	R
Anthraquinone	R	Calcium Sulfate	R	Dibutoxyethyl Phthalate	N
Anthraquinone Sulfonic Acid	R	Camphor	---	Dibutyl Ether	R
Antimony Trichloride	R	Cane Sugar Liquors	R	Dibutyl Phthalate	N
Aqua Regia	R	Caprylic Acid	---	Dibutyl Sebacate	N
Argon	---	Carbitol	---	Dichlorobenzene	R
		Carbolic Acid	R	Dichloroethylene	N
		Carbon Dioxide Dry	R	2,6 - Dichloroindophenal	R

CHEMICAL	RATING
Diesel Fuels	R
Diethylamine	R
Diethyl Cellosolve	R
Diethyl Ether	R
Diglycolic Acid	R
Dimethylamine	R
Dimethyl Formamide	R
Dimethylhydrazine	R
Dimethyl Phthalate	N
Dimethyl Sulfoxide	R
Diethyl Phthalate	N
Dodecyl Alcohol	R
Dodecyl Sulfate	R
Dioxane	R
Diphenyl Oxide	---
Disodium Phosphate	R
Drierite	R
E	
Eosin Y	R
Eriochrome Black T	R
Ether	R
Ethyl Acetate	R
Ethyl Acetoacetate	R
Ethyl Acrylate	R
Ethyl Alcohol	R
Ethyl Benzene	C
Ethyl Chloride	N
Ethyl Chloroacetate	N
Ethylene Bromide	N
Ethylene Chloride	N
Ethylene Chlorohydrin	N
Ethylenediamine	R
Ethylene Dichloride	N
Ethylene Oxide	R
Ethyl Ether	R
Ethyl Formate	R
Ethylene Glycol	C
2-Ethylhexanol	R
Ethyl Mercaptan	R
Ethyl Oxalate	R
F	
Fast Green FCF	R
Fatty Acids	R
Fehlings solution A	R
Fehlings solution B	R
Ferric Ammonium Sulfate	R
Ferric Chloride	R
Ferric Hydroxide	R
Ferric Nitrate	R
Ferric Sulfate	R
Ferrous Chloride	R
Ferrous Hydroxide	R
Ferrous Nitrate	R
Ferrous Sulfate	R
Fish Oil	R
Fluoboric Acid	R
Fluorine Gas (Dry)	R
Fluorine Gas (Wet)	R
Fluosilicic Acid 30%	R
Fluosilicic Acid 50%	R
Formaldehyde Dilute	R
Formaldehyde 35%	R
Formaldehyde 37%	R
Formaldehyde 50%	C
Formic Acid	R
Freon	R
Freon 12	R
Freon 21	---
Freon 22	R
Freon 113	C
Freon 114	---
Fructose	R
Furfural	R
G	
Gallic Acid	R
Gasoline	R
Gasohol	R
Gelatin	R
Glauber's Salt	---
Glucose	R
Glue, PVA	R
Glutathione	R
Glycerine	R
Glycine	R
Glycogen	R
Glycol	C
Glycol Amine	---
Glycolic Acid	R
Glyoxal	R
Grape Sugar	R
Grease	---
Green Liquor	R

CHEMICAL	RATING
H	
Heptane (Type 1)	R
n-Hexane	R
Hexamethylenediamine	R
Hexanol, Tertiary	R
Hydraulic Oil	---
Hydrazine	R
Hydrobromic Acid 20%	R
Hydrobromic Acid 50%	R
Hydrochloric Acid 10%	R
Hydrochloric Acid 30%	R
Hydrocyanic Acid	R
Hydrofluoric Acid Dilute	R
Hydrofluoric Acid 30%	R
Hydrofluoric Acid 50%	R
Hydrofluoric Acid 100%	R
Hydrofluosilicic Acid 50%	R
Hydrogen	R
Hydrogen Cyanide	R
Hydrogen Fluoride	C
Hydrogen Peroxide 50%	R
Hydrogen Peroxide 90%	R
Hydrogen Phosphide	R
Hydrogen Sulfide Dry	R
Hydrogen Sulfide Wet	R
Hydrogen Sulfide, aqueous	R
Hydroquinone, aqueous	R
Hydroxylamine Hydrochloride	R
Hydroxylamine Sulfate	R
Hypochlorous Acid	R
I	
Indigo Carmine	R
Inks	R
Iodine	R
Iodine solution, Lugol's	R
Iron Phosphate	---
Isobutane	C
Isobutyl Alcohol	R
Isooctane	R
Isopropyl Acetate	R
Isopropyl Alcohol	R
Isopropyl Chloride	N
Isopropyl Ether	R
Isophorone	R
J	
Janus Green	R
JP-3 Fuel	R
JP-4 Fuel	R
JP-5 Fuel	R
JP-6 Fuel	R
K	
Kerosene	R
Ketchup	R
Kraft Liquors	R
L	
Lactic Acid 25%	R
Lactic Acid 80%	R
Lactose	R
Lard Oil	C
Latex	---
Lauric Acid	R
Lauryl Chloride	R
Lead Acetate	R
Lead Chloride	R
Lead Nitrate	R
Lead Sulfate	R
Lemon Oil	R
Ligroin	R
Limonene	R
Lime Slurry	R
Lime Sulfur	R
Linoleic Acid	C
Linoleic Oil	---
Linseed Oil	C
Liqueurs	R
Lithium Bromide	R
Lithium Carbonate	R
Lithium Chloride	R
Lithium Hydroxide 50%	R
Lithium Nitrate	R
Lithium Sulfate	R
Lubricating Oil #1	R
Lubricating Oil #2	R
Lubricating Oil #3	R
Ludox	---
Luminol 3-amino Phthalhydrazide	R
DL-lysine Hydrochloride	R
Lysozyme	R

CHEMICAL	RATING
M	
Magnesium Acetate	R
Magnesium Bromide	R
Magnesium Carbonate	R
Magnesium Chloride	R
Magnesium Citrate	R
Magnesium Fluoride	---
Magnesium Hydroxide	R
Magnesium Nitrate	R
Magnesium Oxide	---
Magnesium Sulfate	R
Malachite Green	R
Maleic Acid	R
Malic Acid	R
Maltose	R
Manganese Chloride	R
Manganese Nitrate	R
Manganese Sulfate	R
Menthol	R
Mercuric Chloride	R
Mercuric Cyanide	R
Mercuric Sulfate	R
Mercurous Nitrate	R
Mercury	R
Methane	R
Methanol	R
DL-methionine	R
Methoxyethyl Oleate	---
Methyl Acetate	R
Methyl Acetone	R
Methyl Acrylate	---
Methyl Amine	R
Methyl Bromide	N
Methyl Cellosolve	R
Methyl cellulose	R
Methyl Chloride	N
Methyl Chloroform	N
Methyl Ethyl Ketone	R
Methyl Formate	R
Methyl Green	R
Methyl Isobutyl Carbinol	R
Methyl Isobutyl Ketone	R
Methyl Isopropyl Ketone	R
Methyl Methacrylate	R
Methyl Red	R
Methyl Sulfate	R
Methyl Violet-2B	R
Methyl Violet-6B	R
Methylene Blue	R
Methylene Bromide	N
Methylene Chloride	N
Methylene Chlorobromide	N
Methylene Iodine	N
Methylsulfuric Acid	R
Milk	R
Mineral Oil	R
Molasses	R
Monochloroacetic Acid	R
Monochlorobenzene	N
Monoethanolamine	R
Monosodium Glutamate	R
Motor Oil	R
Morpholine	R
N	
Naphtha	R
Naphthalene	C
Natural Gas	R
Neutral Red	R
Nickel Acetate	R
Nickel Ammonium Sulfate	---
Nickel Chloride	R
Nickel Nitrate	R
Nickel Sulfate	R
Nicotine	R
Nicotinic Acid	R
Nitric Acid 10%	R
Nitric Acid 30%	R
Nitric Acid 40%	R
Nitric Acid 50%	R
Nitric Acid 70%	R
Nitric Acid 100%	R
Nitrobenzene	N
Nitroethane	C
Nitrogen Gas	---
Nitroglycerine	C
Nitroglycol	---
Nitromethane	C
Nitrous Acid	R
Nitrous Oxide	R
O	
n-Octane	C
Octanol	R
Oleic Acid	R

CHEMICAL	RATING
Oleum	R
Olive Oil	C
Orange G - acid orange 10	R
Orange IV - acid orange 5	R
Orcinol	R
Osmium Tetroxide	R
Oxalic Acid	R
Oxygen Gas	R
Ozone	R
Ozonized Water	R
P	
Palm Oil	R
Palmitic Acid 10%	R
Palmitic Acid 70%	R
Pancreatin	R
Papain	R
Paraffin	R
Peanut Oil	C
Pectin	R
n-Pentane	C
Pepsin	R
Peracetic Acid	R
Perchloric Acid 15%	R
Perchloric Acid 70%	R
Perchloroethylene	C
Periodic Acid	R
Perphosphate	R
Phenol	R
Phenolphthalein	R
Phenyl Salicylate	R
Phenyldiazine	C
Phosphate Esters	---
Phosphoric Acid 10%	R
Phosphoric Acid 50%	R
Phosphoric Acid 85%	R
Phosphoric Anhydride	R
Phosphorous (Red)	C
Phosphorous (Yellow)	C
Phosphorous Pentoxide	R
Phosphorous Trichloride	R
Photographic Solutions	R
Phthalic Acid	R
Picric Acid	R
Pine Oil	C
Plating Solutions Brass	R
Plating Solutions Cadmium	R
Plating Solutions Chrome	R
Plating Solutions Copper	R
Plating Solutions Gold	R
Plating Solutions Lead	R
Plating Solutions Nickel	R
Plating Solutions Rhodium	R
Plating Solutions Silver	R
Plating Solutions Tin	R
Plating Solutions Zinc	R
Polyvinyl Acetate	---
Polyvinyl Alcohol	R
Polash	R
Potassium Acetate	R
Potassium Alum	R
Potassium Aluminum	R
Potassium Bicarbonate	R
Potassium Bichromate	R
Potassium Bisulfate	R
Potassium Bitartrate	R
Potassium Borate	R
Potassium Bromate	R
Potassium Bromide	R
Potassium Carbonate	R
Potassium Chlorate	R
Potassium Chloride	R
Potassium Chromate	R
Potassium Citrate	R
Potassium Cyanide	R
Potassium Dichromate	R
Potassium Ethyl Xanthate	---
Potassium Ferricyanide	R
Potassium Ferrocyanide	R
Potassium Fluoride	R
Potassium Hydrogen Phosphate	R
Potassium Hydrogen Phthalate	R
Potassium Hydroxide	R
Potassium Hypochlorite	R
Potassium Iodate	R
Potassium Iodide	R
Potassium Nitrate	R
Potassium Nitrite	R
Potassium Perborate	R
Potassium Perchlorate	R
Potassium Permanganate 10%	R
Potassium Permanganate 25%	R
Potassium Persulfate	R
Potassium Phosphate	R
Potassium Sodium Tartrate	R
Potassium Sulfate	R
Potassium Sulfide	R

CHEMICAL	RATING
Potassium Sulfite	R
Potassium Thiocyanate	R
Propane	R
Propargyl Alcohol	R
Propionic Acid	R
Propyl Acetate	---
Propyl Alcohol	R
N-Propyl Bromide	---
Propylene Dichloride	N
Propylene Glycol	C
Propylene Oxide	R
Pyridine	R
Pyrogallol Acid	R
Pyrrrole	R
Q	
Quinine Sulfate	R
Quinine Chloride Dihydrate	R
Quinone	---
R	
Rayon Coagulating Bath	R
Rennin	R
Resazurin	R
Ringers Solution	R
Rose Bengal Acid Red 94	R
S	
Safranin O	R
Salicylaldehyde	N
Salicylic Acid	R
Selenic Acid, Aq.	R
Silicic Acid	R
Silicone Oil	R
Silver Acetate	R
Silver Chloride	R
Silver Cyanide	R
Silver Nitrate	R
Silver Sulfate	R
Soaps	R
Sodium Acetate	R
Sodium Alum	R
Sodium Aluminate	R
Sodium Arsenate	R
Sodium Benzoate	R
Sodium Bicarbonate	R
Sodium Bichromate	R
Sodium Bisulfate	R
Sodium Bisulfite	R
Sodium Borate	R
Sodium Bromide	R
Sodium Carbonate	R
Sodium Chlorate	R
Sodium Chloride	R
Sodium Chlorite	R
Sodium Chromate	R
Sodium Citrate	R
Sodium Cyanide	R
Sodium Dichromate	R
Sodium Diphenylamine Sulfonate	R
Sodium Dithionite	R
Sodium Ferricyanide	R
Sodium Ferrocyanide	R
Sodium Fluoride	R
Sodium Hexametaphosphate	R
Sodium Hydroxide 15%	R
Sodium Hydroxide 30%	R
Sodium Hydroxide 50%	R
Sodium Hydroxide 70%	R
Sodium Hypochlorite	R
Sodium Iodate	R
Sodium Iodide	R
Sodium Metabisulfite	R
Sodium Metaphosphate	R
Sodium Nitrate	R
Sodium Nitrite	R
Sodium Palmirate	R
Sodium Perborate	R
Sodium Perchlorate	R
Sodium Periodate	R
Sodium Peroxide	R
Sodium Phosphate Acid	R
Sodium Phosphate Alkaline	R
Sodium Phosphate Neutral	R
Sodium Propionate	R
Sodium Silicate	R
Sodium Sulfate	R
Sodium Sulfide	R
Sodium Sulfite	R
Sodium Thiosulphate	R
Sour Crude Oil	R
Soybean Oil	C
Stannic Chloride	R
Stannous Chloride	R
Stannous Sulfate	R
Starch	R
Stearic Acid	R
Streptomycin Sulfate	R
Strontium Bromide	R

CHEMICAL	RATING
Strontium Chloride	R
Styrene	N
Succinic Acid	R
Sugar	R
Sulfamic Acid	R
Sulfate Liquors	R
Sulfite Liquors	R
Sulfur	R
Sulfur Chloride	R
Sulfur Dioxide Gas Dry	R
Sulfur Dioxide Gas Wet	R
Sulfur Trioxide Gas Dry	---
Sulfur Trioxide Gas Wet	N
Sulfuric Acid Up to 30%	R
Sulfuric Acid 50%	R
Sulfuric Acid 60%	R
Sulfuric Acid 70%	R
Sulfuric Acid 80%	R
Sulfuric Acid 90%	R
Sulfuric Acid 93%	R
Sulfuric Acid 94%	R
Sulfuric Acid 95%	R
Sulfuric Acid 96%	R
Sulfuric Acid 98%	R
Sulfuric Acid 100%	R
Sulfurous Acid	R
T	
Tall Oil	R
Tannic Acid	R
Tanning Liquors	R
Tar	C
Tartaric Acid	R
Terpineol	---
Tetrachloroethane	N
Tetrachloroethylene	N
Tetracycline hydrochloride	R
Tetraethyl Lead	R
Tetrahydrofuran	R
Tetralin	N
Thiamine Hydrochloride	R
Thionin	R
Thionyl Chloride	R
Thymol	R
Titanium Dioxide	R
Titanium Tetrachloride	R
Toluene	C
Tomato Juice	R
Transformer Oil	R
Transformer Oil DTE/30	R
Tributyl Citrate	---
Tributyl Phosphate	R
Trichloroacetic Acid	R
Trichloroethylene	N
Triethanolamine	R
Triethylamine	R
Trimethylpropane	R
Trisodium Phosphate	R
Trypsin	R
Tung Oil	C
Turpentine	C
U	
Urea	R
Urease	R
Urine	R
V	
Varnish	---
Vaseline	C
Vegetable Oil	C
Vinegar	R
Vinyl Acetate	R
W	
Water, Acid Mine	R
Water, Deionized	R
Water, Distilled	R
Water, Potable	R
Water, Salt	R
Water, Sea	R
Water, Soft	R
Water, Waste	R
Whiskey	R
White Liquor	R
Wine	R
X	
Z	
Xylene	C
Zinc Acetate	R
Zinc Carbonate	R
Zinc Chloride	R
Zinc Nitrate	R
Zinc Stearate	R
Zinc Sulfate	R