

GENERAL CHEMICAL RESISTANCE LIST

The resins used in the manufacturing of Go-To-Tank's plastic tanks are highly resistant to the most aggressive chemicals. The following chart affords a reasonable guide to the performance of all Go-To-Tank containers with most common chemicals.

As a rule, mechanical stress, elevated temperatures and extended exposures tend to compound the effects of the reagent. These factors must be considered whenever the use of chemical handling equipment is planned.

Under normal conditions, those chemicals rated "S" can be handled indefinitely. Chemical rated "M" will eventually have some effect. Chemicals rated "U" are generally not recommended for extended storage.

The temperature levels of 70°F and 140°F are used in this table because they cover the majority of tank applications. They are not intended to show upper operating limits. For applications involving higher operating temperatures or service with chemicals or conditions not specified here, contact Go-To-Tanks.

CAUTION: Service with strong oxidizing agents, stress-cracking agents, chemical mixtures or at elevated temperatures may create conditions which cannot be defined by a chemical resistance guide. Preliminary testing is recommended for severe or unfamiliar applications.

This data is published from reports by leading chemical companies, and this data does not represent actual testing conducted by Go-To-Tanks. This report is offered as a guideline for your material selection. However, Go-To-Tanks is not responsible for the use or misuse of the information contained herein.

NOTE: Cross linked and LLPE are subject to permeation by strong mineral acids, aromatic compound hydrocarbons and chlorinated hydrocarbons. Due to this possible permeation, a reduction of the tensile strength of the container might be 50% when 100% concentration of these chemical materials is stored for a sufficient length of time.

S - Satisfactory • U - Unsatisfactory • M - Marginal • N - Unknown

Some reagents are marked with an asterisk (*). Although cross-linked polyolefin is chemically resistant to these agents, excess temperatures and pressures can, under certain conditions, lead to stress cracking.

On reagents marked marginal, chemical attack will be recognized by a loss of physical properties of the container.

REAGENT	70°F (21°C)	140°F (60°C)	REAGENT	70°F (21°C)	140°F (60°C)	REAGENT	70°F (21°C)	140°F (60°C)
Acetic Acid* 1-10%	S	S	Benzene Sulfonic Acid	S	S	Chloroform	M	U
Acetic Acid* 10-60%	S	M	Bismuth Carbonate Sat'd	S	S	Chlorosulfonic Acid 100%	M	U
Acetic Acid* 80-100%	S	M	Bleach Lye 10%	S	S	Chrome Alum Sat'd	S	S
Acetone	S	M	Black Liquor	S	S	Chromic Acid 20%	S	S
Acrylic Emulsions*	S	S	Borax Cold Sat'd	S	S	Chromic Acid Up to 50%	S	S
Aluminum Chloride--Dilute	S	S	Boric Acid Dilute	S	S	Chromic Acid & Sulfuric Acid	S	M
Aluminum Chloride Conc.	S	S	Boric Acid Conc.	S	S	Cider*	S	S
Aluminum Floride Conc.	S	S	Bromic Acid 10%	S	S	Citric Acid* Sat'd	S	S
Aluminum Sulfate Conc.	S	S	Bromine Liquid 100%	M	U	Coconut Oil Alcohols*	S	S
Alums (All Types) Conc.	S	S	Butanediol* 10%	S	S	Cola Concentrates	S	S
Ammonia 100% Dry Gas	S	S	Butanediol* 60%	S	S	Copper Chloride Sat'd	S	S
Ammonium Carbonate	S	S	Butanediol* 100%	S	S	Copper Cyanide Sat'd	S	S
Ammonium Chloride Sat'd	S	S	Butyl Alcohol* 100%	S	S	Copper Fluoride 2%	S	S
Ammonium Fluoride 20%	S	S	Calcium Bisulfide	S	S	Copper Nitrate Sat'd	S	S
Ammonium Hydroxide 0.888 S.O.	S	S	Calcium Carbonate Sat'd	S	S	Copper Sulfate Dilute	S	S
Ammonium Metaphosphate Sat'd	S	S	Calcium Chlorate Sat'd	S	S	Copper Sulfate Sat'd	S	S
Ammonium Nitrate Sat'd	S	S	Calcium Chloride Sat'd	S	S	Cottonseed Oil*	S	S
Ammonium Persulfate Sat'd	S	S	Calcium Hydroxide	S	S	Cuprous Chloride Sat'd	S	S
Ammonium Sulfate Sat'd	S	S	Calcium Hypochlorite Bi' ch Sol.	S	S	Cychohexanol*	S	S
Ammonium Sulfide Sat'd	S	S	Calcium Nitrate 50%	S	S	Cyclohexanone	M	U
Ammonium Thiocyanate Sat'd	S	S	Calcium Sulfate	S	S	Detergents Synthetic*	S	S
Amyl Acetate	S	M	Comphor Oil	M	U	Developers, Photographic	S	S
Amyle Alcohol* 100%	S	S	Carbon Dioxide 100% Dry	S	S	Dextrin Sat'd	S	S
Amyl Chloride 100%	N	U	Carbon Dioxide 100% Wet	S	S	Dextrose Sat'd	S	S
Aniline 100%	S	N	Carbon Dioxide Cold Sat'd	S	S	Dibutylphthalate	S	M
Antimony Chloride	S	S	Carbon Disulphide	N	U	Disodium Phosphate	S	S
Aqia Regoa	M	U	Carbon Monoxide	S	S	Diazo Salts	S	S
Barium Carbonate Sat'd	S	S	Carbon Tetrachloride	M	U	Diethylene Glycol*	S	S
Barium Chloride	S	S	Carbonic Acid	S	S	Diglycolic Acid*	S	S
Barium Hydroxide	S	S	Caster Oil* Conc.	S	S	Dimethylamine	M	U
Barium Sulfate Sat'd	S	S	Chlorine Dry Gas 100%	S	M	Emulsions, Photographic*	S	S
Barium Sulfide Sat'd	S	S	Chlorine Moist Gas	M	U	Ethyl Acetate 100%	S	M
Beer	S	S	Chlorine Liquid	M	U	Ethyl Alcohol* 100%	S	S
Benzine	S	M	Chlorobenzene	M	U	Ethyl Alcohol* 35%	S	S

REAGENT	70°F (21°C)	140°F (60°C)	REAGENT	70°F (21°C)	140°F (60°C)	REAGENT	70°F (21°C)	140°F (60°C)
Ethyl Butyrate	M	U	Methyl Chloride	M	U	Potassium Sulfite Conc.	S	S
Ethyl Chloride	M	U	Methyl Ethyl Ketone 100%	S	U	Potassium Persulfate Sat'd	S	S
Ethyle Ether	M	U	Methyl Sulfuric Acid*	S	S	Propargyl Alcohol*	S	S
Ethylene Chloride	N	U	Methylene Chloride 100%	M	U	Propyl Alcohol*	S	S
Ethylene Chlorohydrin	U	U	Milk	S	S	Propylene Dichloride 100%	M	U
Ethylene Dichloride	M	U	Mineral Oils	S	M	Propylene Glycol*	S	S
Ethlene Glycol*	S	S	Molasses Comm.	S	S	Rayon Coagulating Bath*	S	S
Ferric Chloride Sat'd	S	S	Nickel Chloride Sat'd	S	S	Sea Water	S	S
Ferric Nitrate Sat'd	S	S	Nickel Nitrate Conc.	S	S	Selenic Acid	S	S
Ferric Sulphate	S	S	Nickel Sulfate At'd	S	S	Shortening*	S	S
Ferrous Chloride Sat'd	S	S	Nicotine* Dilute	S	S	Silicic Acid	S	S
Ferrous Sulphate	S	S	Nicotine Acid*	S	S	Silver Nitrate Sol.	S	S
Fish Solubles*	S	S	Nitric Acid 0-30%	S	S	Soap Solution* Any Conc'n	S	S
Fluoboric Acid	S	S	Nitric Acid 30-50%	S	M	Sodium Acetate Sat'd	S	S
Flourine	S	M	Nitric Acid 70%	S	M	Sodium Benzoate 35%	S	S
Floussilicic Acid 32%	S	S	Nitric Acid 95-98%	U	U	Sodium Bicarbonate Sat'd	S	S
Floussilicic Acid Conc.	S	S	Nitrobenzene 100%	U	U	Sodium Bisulfate Sat'd	S	S
Formaldehyde* 40%	S	N	Octyl Cresol	S	U	Sodium Bisulfite Sat'd	S	S
Formic Acid* 1-20%	S	S	Oils and Fats	S	U	Sodium Borate	S	S
Formic Acid* 20-50%	S	S	Oleic Acid Conc.	S	U	Sodium Bromide Dilute Sol.	S	S
Formic Acid* 100%	S	S	Oleum Conc.	U	U	Sodium Carbonate Con.	S	S
Fructose Sat'd	S	S	Orange Extract	S	S	Sodium Carbonate	S	S
Fruit Pulp	S	S	Oxalic Acid* Dilute	S	S	Sodium Chlorate Sat'd	S	S
Fuel Oil	S	U	Oxalic Acid* Sat'd	S	S	Sodium Chloride Sat'd	S	S
Furfural 100%	M	U	Ozone 100%	S	U	Sodium Cyanide	S	S
Furfuryl Alcohol	M	U	Perchloric Acid 10%	S	S	Sodium Dichromate Sat'd	S	S
Gallic Acid* 30%	S	S	Petroleum Ether	M	U	Sodium Ferricyanide	S	S
Gasoline*	S	U	Phenol 90%	S	U	Sodium Ferrocyanide Sat'd	S	S
Gin	S	U	Phosphoric Acid Up 30%	S	S	Sodium Fluoride Sat'd	S	S
Glucose	S	U	Phosphoric Acid Over 30%	S	S	Sodium Hydroxide Conc.	S	S
Glycerine*	S	S	Phosphoric Acid 90%	S	S	Sodium Hypochlorite	M	M
Glycol*	S	S	Phosphorous (Yellow) 100%	S	N	Sodium Nitrate	S	S
Glycolic Acid* Sat'd	S	S	Phosphorus Pentoxide 100%	S	N	Sodium Sulfate	S	S
Grape Sugar Sat'd Aq.	S	S	Photographic Solutions	S	S	Sodium Sulfide 25%	S	S
Hexanol Tert.*	S	S	Pickling Baths			Sodium Sulfide Sat'd Sol.	S	S
Hydrobromic Acid 50%	S	S	Sulfuric Acid*	S	S	Sodium Sulfite Sat'd	S	S
Hydrocyanic Acid Sat'd	S	S	Hydrochloric Acid*	S	S	Stannous Chloride Sat'd Sol.	S	S
Hydrochloric Acid 10%	S	S	Sulfuric-Nitric*	S	U	Stannic Chloride Sat'd	S	S
Hydrochloric Acid 30%	S	S	Plating Solutions			Starch Solution* Sat'd	S	S
Hydrochloric Acid 35%	S	S	Brass*	S	S	Stearic Acid* 100%	S	S
Hydrochloric Acid Conc.	S	S	Cadmium*	S	S	Sulfuric Acid 0-50%	S	S
Hydrofluoric Acid 40%	S	S	Chromium*	N	N	Sulfuric Acid 70%	S	M
Hydrofluoric Acid 60%	S	S	Copper	S	S	Sulfuric Acid 80%	S	U
Hydrofluoric Acid 75%	S	S	Gold*	S	S	Sulfuric Acid 96%	M	U
Hydrogen 100%	S	S	Indium*	S	S	Sulfuric Acid 98%	M	U
Hydrogen Bromide 10%	S	S	Lead*	S	S	Sulfuric Acid, Fuming	U	U
Hydrogen Chloride Gas Dry	S	S	Nickel*	S	S	Sulfurous Acid	S	S
Hydrogen Peroxide 30%	S	S	Rhodium*	S	S	Tallow	S	M
Hydrogen Peroxide 90%	S	M	Silver*	S	S	Tannic Acid* 10%	S	S
Hydrogen Phosphide 100%	S	S	Tin*	S	S	Tanning Extracts* Comm.	S	S
Hydroquinone	S	S	Zinc*	S	S	Tartaric Acid Sat'd	N	N
Hydogen Sulfide	S	S	Potassium Bicarbonate Sat'd	S	S	Tetrahydrofurane	N	U
Hypochlorus Acid Conc.	S	S	Potassium Borate 1%	S	S	Titanium Tetrachloride Sat'd	N	U
Inks*	S	S	Potassium Bromate 10%	S	S	Toluene-Under 50%	S	S
Lodine (Alc. Sol.) Conc.	S	U	Potassium Bromide Sat'd	S	S	Toluene-Over 50%	M	U
Lactic Acid* 10%	S	S	Potassium Carbonate	S	S	Toluene Sulfonic Acid	S	S
Lactic Acid* 90%	S	S	Potassium Chlorate Sat'd	S	S	Transformer Oil	S	M
Latex*	S	S	Potassium Chloride Sat'd	S	S	Trisodium Phosphate Sat'd	S	S
Lead Acetate Sat'd	S	S	Potassium Chromate 40%	S	S	Trichloroethylene	M	U
Lube Oil	S	M	Potassium Cyanide Sat'd	S	S	Urea* Up to 30%	S	S
Magnesium Carbonate Sat'd	S	S	Potassium Dichromate 40%	S	S	Urine	S	S
Magnesium Chloride Sat'd	S	S	Potassium Ferri/	S	S	Vinegar Comm.	S	S
Magnesium Hydroxide Sat'd	S	S	Ferro Cyanide Sat'd	S	S	Vanilla Extract*	S	S
Magnesium Nitrate Sat'd	S	S	Potassium Fluoride	S	S	Wetting Agents*	S	S
Magnesium Sulphate Sat'd	S	S	Potassium Hydroxide 20%	S	S	Whiskey*	S	N
Mercuric Chloride Sat'd	S	S	Potassium Hydroxide Conc.	S	S	Wines	S	S
Mercuric Cyanide Sat'd	S	S	Potassium Hydroxide Sat'd	S	S	Xylene	M	U
Mercurous Nitrate Sat'd	S	S	Potassium Nitrate Sat'd	S	S	Yeast	S	S
Mercury	S	S	Potassium Perborate Sat'd	S	S	Zinc Chloride Sat'd	S	S
Methyl Alcohol* 100%	S	S	Potassium Perchlorate 10%	S	S	Zinc Sulfate Sat'd	S	S
Methyl Bromide	M	U	Potassium Sulfate Conc.	S	S			
			Potassium Sulfide Conc.	S	S			

NOTE: Sodium Hypochlorite has marginal compatibility and will be stored at user's discretion and responsibility only.
Go-To-Tanks does not warranty tanks used to store Sodium Hypochlorite.