



Trench Drain Chemical Resistance Chart

The following chart will assist in selecting what base material to specify for trench drain systems. The combination of temperature, chemicals and chemical concentration determines resistance of channel material to the applications.

Y - Indicates the material is resistant to the particular chemical.

N - Indicates the material is insufficiently resistant to the particular chemical and its use is not recommended.

“-” - Indicates this particular chemical has not been tested and no recommendation is being made for it.

F - Temperature is rated for maximum exposure in Fahrenheit.

CHEMICAL MEDIUM	% CONCENTRATION	RESISTANCE POLYPROPYLENE (Reg. Furn.)	CHEMICAL MEDIUM	% CONCENTRATION	RESISTANCE POLYPROPYLENE (Reg. Furn.)
Acetic Acid Glacial	97	Y 68F	Creosote	-	-
Acetic Acid50	Y 140F		Cyclohexane	-	N
Acetic Anhydride	-	-	Cyclohexanol	100	Y 68F
Acetone	100	Y 140F	Detergent	100	Y 140F
Alcohol, Ethyl	100	Y 180F	Diethylene Glycol	100	Y 160F
Alcohol, Isopropyl	100	Y 150F	Diglycolic Acid	100	Y 100F
Alum	100	Y 100F	Dimethylformamide	10	Y 120F
Aluminum Chloride	100	Y 140F	Dioxane	100	Y 73F
Aluminum Fluoride	100	Y 140F	Disodium Phosphate	100	Y 180F
Aluminum Sulphate	100	Y 140F	Epsom Salts	100	Y 180F
Ammonium100	N		Ethyl Glycol	100	Y 140F
Ammonium Chloride	100	Y 140F	Ethylene Diamene	100	Y 140F
Ammonium Fluoride	20	Y 140F	Ethylene Glycol	100	Y 140F
Ammonium Nitrate	100	Y 140F	Ferric Chloride	100	Y 140F
Ammonium Phosphate	100	Y 140F	Formaldehyde	40	Y 140F
Ammonium Sulphate	100	Y 140F	Formic Acid	100	Y 140F
Ammonium Sulfide	100	Y 140F	Fructose	100	Y 140F
Aniline	100	Y 140F	Fruit Juices	100	Y 140F
Anti-Freeze	100	Y 140F	Furfury Alcohol	-	-
Antimony Trichloride	100	Y 180F	Galetic Acid		
Barium Chloride	100	Y 140F	Gasoline, leaded	100	Y 68F
Barium Hydroxide	100	Y 140F	Gasoline, unleaded	100	Y 68F
Battery Acid	60	Y 68F	Gelatin	100	Y 140F
Beer	100	Y 140F	Gin	100	Y 120F
Benzene	-	-	Glucose	20	Y 140F
Benzoic Acid	100	Y 140F	Glycol	100	Y 120F
Benzyl Alcohol	-	-	Haplane	-	-
Bismuth Carbonate	100	Y 180F	Hexane	100	Y 68F
Black Liquor	100	Y 140F	Hydrazine	-	-
Boric Acid	100	Y 180	Hydrobromic Acid	48	Y 140F
Brine	100	Y 180	Hydrochloric Acid	20	Y 140F
Bromic Acid-	-	-	Hydrofluoric Acid	40	Y 68F
Bulyl Acetate	100	N	Hydrofluoric Acid	-	-
Butanol	-	-	Hydrogen		
Butyric Acid	100	Y 75F	Hydrogen Peroxide	30	Y 68F
Calcium Acetate	-	-	Hydrogen Sulphide (dry)	100	Y 140F
Calcium Chloride	50	Y 140F	Hydroxyacetic Acid	-	-
Calcium Hypochlorite	20	Y 140F	Iodine Solution		
Calcium Nitrate	100	Y 140F	Isopropanol	100	Y 140F
Carbonic Acid	100	Y 140F	Isopropyl Ether		N
Carbon Dioxide (dry)	100	Y 140F	Jet Fuel JP-3	-	-
Castor Oil	100	Y 150F	Jet Fuel JP-4		
Chloroethanol	-	-	Jet Fuel JP-5	-	-
Citric Acid	10	Y 150F	Kerosene		
Coconut Oil	100	Y 100F	Ketones	100	Y 68F
** Cod Liver Oil	-	-	Lactic Acid	20	Y 140F
Copper Acetate	-	-	Lactic Acid	-	-
Copper Chloride	100	Y 140F	Lard Oil		
Copper Fluoride	100	Y 140F	Lead Acetate	100	Y 140F
Copper Salts	100	Y 180F	Lead Nitrate		
Cotton Seed Oil	100	Y 140F	Lemon Oil	100	N



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CHEMICAL MEDIUM	% CONCENTRATION	RESISTANCE POLYPROPYLENE (Regularly Furnished)
Linseed Oil	100	Y 140F
Lubricating Oil	100	Y 140F
Machine Oil	100	Y 120F
Magnesium Chloride	100	Y 140F
** Maleic Acid	100	Y 140F
Mercuric Chloride	100	Y 140F
Mercuric Cyanide	100	Y 140F
Mercury	100	Y 140F
Methyl Glycol-	-	-
Methyl Ethyl Ketone	100	Y 68F
Methylene Chloride	100	N
Mineral Oil	100	Y 68F
Morpholine	-	-
Neon	-	-
Nickel Acetate	-	-
Nickel Cyanide	-	-
Nickel Sulphate	100	Y 140F
Nitric Acid	30	Y 68F
Oil, Diesel Fuel	100	Y 68F
Oil, Fuel	100	Y 68F
Oil, Olive	100	Y 140F
Oxalic Acid	50	Y 68F
Phenol	100	Y 140F
Phosphoric Acid	95	Y 140F
Phosphates	-	-
Phosphorus Pentoxide	-	-
Photographic Developer	100	Y 140F
Pickle Brine	100	Y 140F
Picric Acid	-	-
Plating Solution, Arsenic	100	-
Plating Solution, Bronze	100	-
Plating Solution, Chrome	-	-
Plating Solution, Copper	100	Y 140F
Plating Solution, Nickel	100	Y 140F
Plating Solution, Silver	100	Y 140F
Polypropylene Glycol	-	-
Polyvinyl Alcohol	-	-
Potassium Bromate	10	Y 140F
Potassium Chloride	100	Y 140F
Potassium Hydroxide	50	Y 140F
Potassium Nitrate	100	Y 140F
Propanol	-	-
Prussic Acid	-	-
** Rum	100	Y 100F
Salt Brine	100	Y 140F
Sea Water	100	Y 140F
Silicic Acid	100	Y 140F
Silicone Oil	100	Y 140F
Sodium Benzoate	-	-
Sodium Bisulphite	-	-
Sodium Hydroxide	50	Y 140F
Sodium Peroxide	-	-

CHEMICAL MEDIUM	% CONCENTRATION	RESISTANCE POLYPROPYLENE (Regularly Furnished)
Sodium Silicate	100	Y 140F
Sodium Sulfide	25	Y 140F
Soybean Oil	100	Y 140F
Spermaceti	-	-
Sugar Solutions	100	Y 140F
Sulphuric Acid	60	Y 68F
Tallow	-	-
Tannic Acid	100	Y 140F
Toluene	-	N
Tomato Juice	100	Y 140F
Trichloroethylene	100	Y 140F
Urea	100	Y 140F
Urine	100	Y 140F
Vaseline	100	Y 140F
Vegetable Oil	100	Y 140F
** Vinegar	100	Y 140F
** Water, Distilled	100	Y 150F
** Water, Potable	100	Y 180F
Water Sewage	100	Y 180F
Whiskey	100	Y 140F
White Liquor	100	Y 140F
Wine	100	Y 140F
Xylene	-	N
Yeast	100	Y 140F
Zinc Salts	100	Y 140F

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