



Zurn Chemical Resistance Information Flo-Thru Drainage Systems

Chart below shows chemical resistance of polyester and vinylester to select chemicals. For a more complete list or for other chemicals, contact your Zurn Sales Representative.

Chemical	Percentage Concentration	Polyester Resin	Vinylester Resin
		Max. Temperature °F	
Acetic Acid	50	120	210
Acetone	10	NR	NR
Ammonium Acetate	65	NR	80
Ammonium Chloride	All	150	210
Amyl Alcohol	All	NR	120
Benzene	100	NR	NR
Borax	100	150	210
Boric Acid	All	150	210
Chlorine, dry gas	100	120	210
Chlorine, wet gas	100	NR	210
Chlorine Dioxide	All	NR	150
Chlorine Water	Sat'd.	NR	180
Chromic Acid	5	NR	150
Chromic Acid	20	NR	120
Citric Acid	All	150	210
Crude Oil (Sour)	100	150	210
Dibutyl Ether	100	NR	180
Diesel Fuel	100	110	180
Diethylene Glycol	100	140	180
Ethylene Glycol	100	150	210
Fatty Acids	All	150	210
Fuel Oil	100	150	180
Gasoline, Aviation	100	100	180
Glycerine	100	150	210
Hydraulic Fluid	100	NR	180
Hydrogen Chloride	100	110	210
Jet Fuel (JP-4)	100	-	180



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Kerosene	100	110	180
Lead Acetate	All	80	210
Linseed Oil	100	150	210
Magnesium Nitrate	All	150	210
Mercury	100	150	210
Minerals Oils	100	150	210
Naptha	100	80	180
Napthalene	100	110	210
Nickel Sulfate	All	110	210
Nitric Acid	5	NR	150
Potassium Bicarbonate	50	–	180
Potassium Nitrate	All	150	210
Silver Nitrate	All	150	210
Sodium Acetate	All	150	210
Sodium Carbonate	10	NR	180
Sodium Chloride	50	NR	100
Sodium Hydroxide	50	NR	210
Sour Crude Oil	100	150	210
Sugar, Sucrose	All	–	210
Sulfuric Acid	75	–	100
Toluene	100	NR	80
Turpentine	100	NR	150
Vinegar	100	110	210
Vinyl Toluene	100	–	80
Xylene	100	NR	80
Zinc Chloride	70	150	210

NR = Not Recommended

– = No Information Available

Constant temperatures should not exceed 180°F.



Zurn Chemical Resistance Information
Perma-Trench Drainage Systems

Chart below shows chemical resistance of high density polyethylene structural composite to select chemicals and temperatures at the maximum concentration percentage. For a more complete list or for other chemicals, contact your Zurn Sales Representative.

Chemical	Max.% Concentration	Max. Temp. F
Acetic Acid	60	70
Acetone	All	140
Alcohol	All	140
Aluminum Chloride	All	140
Ammonia	All	68
Ammonium Hydroxide		NR
Battery Acid	All	140
Beer	All	140
Benzene	All	140
Borax	All	140
Brake Fluid	All	140
Bromic Acid	10	140
Calcium Carbide	All	140
Calcium Chloride	All	140
Calcium Hypochlorite	All	140
Carbon Tetrachloride		NR
Chlorine Liquid		NR
Chlorobenzene		NR
Citrus Juices	All	140
Dibutyl Ether		NR
Dichloroethane		NR
Ethanol	96	140
Ethyl Alcohol	96	140
Ethylene Dichloride		NR
Formaldehyde	10	140
Fructose	All	140
Fuel Oil	All	140
Heptane		NR



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Hydraulic Fluid	All	68
Hydrochloric Acid	35	140
Jet Fuel	All	140
Kerosene	All	140
Machine Oil	All	68
Methyl Ethyl Ketone		NR
Methanol	All	68
Methyl Alcohol	All	68
Milk	All	140
Phosphoric Acid	90	140
Sodium Carbonate	All	140
Sodium Hydroxide	All	140
Sodium Nitrate	50	140
Sulfuric Acid	50	140
Toluene		NR
Urine	All	140
Vinegar	All	140
Water, Distilled	All	140
Xylene		NR
Zinc Oxide	All	140
Zinc Sulfate	All	140
NR = Not Recommended		



**Zurn Chemical Resistance Information
Sani-Flo Drainage Systems**

Typical corrosion resistance of type 304 and 316 stainless steel to various chemicals.

Code :

a – Unaffected

b – Slightly Attacked

c – Attacked

m – Complete details concerning the conditions of service must be evaluated.

Chemical	Type		Chemical	Type		Chemical	Type	
	Numbers			Numbers			Numbers	
	CF8 304	CF8M 316		CF8 304	CF8M 316		CF8 304	CF8M 316
ORGANIC SUBSTANCES			SALTS			SALTS, continued		
Acetone	a	a	Aluminum Chloride	c	c	Potassium Hydrate	a	a
Benzol	a	a	Aluminum Fluoride	c	b	Potassium Nitrate	a	a
Carbon Tetrachloride	c	c	Aluminum Sulfate	a	a	Potassium Oxalate	a	a
Ethyl Alcohol	a	a	Ammonium Alum	a	a	Potassium	a	a
Ethyl Chloride	a	a	Ammonium Bromide	c	a	Permanganate		
Ethyl Ether	a	a	Ammonium Chloride	b	a	Potassium Sulfate	a	a
Food Pastes	a	a	Ammonium	a	a	Silver Nitrate	a	a
Fruit Juices	a	a	Hydroxide			Silver Cyanide	a	a
Ink	m	m	Ammonium Nitrate	a	a	Sodium Bicarbonate	a	a
Mustard	b	a	Ammonium Sulfate	a	a	Sodium Borate	a	a
Paregoric Cmpd.	a	a	Barium Chloride	a	a	Sodium Bromide	a	a
Quinine Bisulfate	b	a	Bleaching Powder	c	a	Sodium Chloride (2% aerated)	a	a
Quinine Sulfate	a	a	Calcium Chloride	c	a			
Vinegar at 70°F	m	m	Calcium Hydroxide or Oxide	a	a	Sodium Citrate	a	a
						Sodium Fluoride	b	NR
ACIDS			Copper Chloride	c	c	Sodium Hydroxide	a	a
Acetic	m	m	Copper Cyanide	a	a	Sodium Nitrate	a	a



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Benzoic	a	a	Copper Nitrate	a	a	Sodium Peroxide (212 °F)	a	a
Boric	a	a	Copper Sulfate (plus 2% sulfuric acid)	a	a			
Carbolic	a	a				Stannic Chloride	c	c
Chromic (50%)	c	c	Copper Sulfate	a	a	Stannous Chloride	b	NR
Citric	a	a	Creosote	c	a	Sulfur (molten) 500 °F	a	a
Formic	c	m	Creosote (plus 3% salt)	c	c	Sulfur Chloride	b	NR
Hydrobromic	c	c				Titanium Tetrachloride	a	a
Hydrocyanic	a	a	Hydrogen Peroxide Magnesium	b	a	Zinc Chloride	c	b
Hydrochloric	c	c				Zinc Sulfate	a	a
Hydrofluoric	c	c	Carbonate	a	a			
Lactic	a	a	Magnesium Chloride	m	m	MISCELLANEOUS		
Nitric (conc.)	a	a	Magnesium Sulfate	a	a	Ammonia	a	a
Nitric (conc.plus 2% HCl)	a	NR	Magnesium Hydroxide	a	a	Baking Oven Gases	a	a
Nitrous (conc.)	a	a	Magnesium Nitrate	a	a	Bromine	c	c
Oxalic	m	m	Phosphorous Trichloride	a	a	Carbonated Beverages	a	a
Phosphoric	a	a	Potassium Bromide	a	a	Chlorine (wet and dry)	c	c
Phosphoric (10%)	a	a	Potassium Carbonate	a	a	Glycerin	a	a
Picric (conc.)	a	a	Potassium Chloride	m	m	Hydrogen Sulfide (400 °F)	b	a
Pyrogallic (conc.)	a	a	Potassium Chlorate	a	a	Iodine	c	a
Pyroligneus (conc.)	a	a	Potassium Cyanide	a	a	Lead (molten)	c	c
Stearic (conc.)	a	a	Potassium Dichromate	a	a	Lysol	m	m
Succinic (molten)	c	NR	Potassium Ferricyanide	a	a	Mercury	a	a



Zurn Chemical Resistance Information
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Sulfuric (conc.)	a	a	Potassium Ferricyanide (boiling)	a	a	Sauerkraut Brine	c	a
Sulfuric (dil.)	m	m	Potassium Hypochlorite	c	m	Sea Water	m	m
Sulfuric 15% (plus 2% potassium dichromate)	a	a	Potassium Iodide	a	a	Sulfur Dioxide	b	b
Sulfurous (conc.)	b	a	Potassium Iodide (sat.plus 0.1% sodium carbonate evaporated to dryness)	a	a	Vegetable Juices	a	a
Tannic (conc.)	a	a				X-ray Developing Solution	b	a
Tartaric (conc.)	a	a				Zinc (molten)	c	c
Trichloroacetic Acid (10%)	a	a						
Uric (conc.)	a	a						
NR = Not Recommended								