POLYDRAIN
Chemical Resistance Guide

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CHEMICAL RESISTANCE GUIDE

Conventional cast-in-place trench drains are susceptible to deterioration from a wide variety of chemicals, including such common and highly present substances as salt, fuel oil, sewage, gasoline, and dilute acids. Normal concrete can absorb as much as 5% moisture. Cyclic freeze and thaw is extremely detrimental causing “break-up” and deterioration.

ABT, Inc. products are designed to withstand hostile work environments and severe weather abuse.

POLYDYN[7]

Standard ABT[7], Inc. products are manufactured from PolyDyn; an advanced formulation of select quartz aggregates and inert mineral fillers bonded with high grade polyester resins. This unique material is suitable for most drainage applications, including all normal exterior and interior drainage involving exposure to salt, gasoline, fuel oil, and many dilute acids and alkalis.

POLYCHAMPION[7]

PolyChampion is formulated to resist heavily concentrated and corrosive chemicals. Special resins of vinylester, recognized for their excellent corrosion resistance, are used as binders in the polymer concrete mixture. Only inert quartz minerals are used as aggregates.

GRATINGS

ABT, Inc. offers a variety of gratings that are manufactured to offer corrosion resistance. Fiberglass mesh grates formulated with vinylester resins offer corrosion resistance properties very similar to PolyChampion. Grates are supplied with stainless steel locking devices and bolts. Slotted grates and solid covers in stainless steel are also available.

CHARTS

This guide is intended to provide engineers and designers with specific chemical resistance information for the PolyDrain system. Chemicals, test concentrations and maximum recommended temperatures for both PolyDyn and PolyChampion are listed. An asterisk (*) indicates that no data is available. N/R denotes “Not Recommended”.

When a particularly corrosive environment is being considered, or the system will be subjected to chemicals not listed in the charts, ABT, Inc. recommends that a coupon of PolyDyn and/or PolyChampion be placed in the chemical for an appropriate test period to determine suitability.

This information is presented for use by competent personnel in the selection of a corrosion resistant drainage system. The chemical resistance data has been supplied by PolyDrain resin suppliers and represents their experience, testing and analysis.

Chemical Environment	Concentration %	Max. Recommended Temp. PolyDyn °F	Max. Recommended Temp. Poly-Champion °F
A			
Acetaldehyde	All	*	N/R
Acetic Acid	10	150	210
	25	75	210
	50	N/R	180
Acetic Acid, Glacial	100	*	N/R
Acetone	10	*	180
	25	150	*
	50	75	*
	100	N/R	N/R
Acetonitrile	100	*	N/R
Acetophenone	100	*	N/R
Acetyl Chloride	100	*	N/R
Acrylic Acid, up to 25%	25	*	100
Acrylic Latex	All	*	120
Acrylontirile	100	*	N/R
Alcohol, Amyl	100	180	200
Amyl, Alcohol	Vapor	*	150
Alcohol, Ethyl	95	180	100
Alcohol, Methyl	100	140	80
Alkyl Benzene Sulfonic Acid	92	*	120
Allyl Alcohol	100	*	N/R
Allyl Chloride	All	*	80
Alpha Methyl Styrene	100	*	N/R
Alpha Olefin Sulfates	100	*	120
Alum	All	180	220
Aluminum Chloride	100	180	220
Aluminum Chlorohydrate	All	*	210
Aluminum Chlorohydroxide	50	*	210
Aluminum Citrate	All	*	200
Aluminum Flouride3	All	*	80
Aluminum Hydroxide	All	N/R	200
Aluminum Nitrate	100	100	160
Aluminum Potassium Sulfate	100	180	220
Aluminum Sulfate	All	180	220
Amino Acids	All	*	100
Ammonia, Liquified	All	*	N/R
Ammonia (Dry Gas)	All	*	100
Ammonium Acetate	65	*	80
Ammonium Benzoate	All	*	80
Ammonium Bicarbonate	20	150	160
	50	75	160
	100	75	160
Ammonium Bisulfite			
Black Liquor	—	*	180
Ammonium Bromate	40	*	150
Ammonium Bromide	40	*	150
Ammonium Carbonate	All	75	150
Ammonium Chloride	100	180	210
Ammonium Citrate	All	*	150
Ammonium Fluoride	All	*	120
Ammonium Hydroxide	1	*	190
(Aqueous Ammonia)	5	*	170
	10	N/R	150
	20	N/R	150
	29	N/R	100
Ammonium Lauryl Sulfate	30	*	120
Ammonium Nitrate	All	100	220
Ammonium Persulfate	All	100	180

Chemical Environment	Concentration %	Max. Recommended Temp. PolyDyn °F	Max. Recommended Temp. Poly-Champion °F
Ammonium Phosphate (Basic)	65	*	210
Ammonium Sulfate	All	75	210
Ammonium Sulfide (Bisulfide)	All	*	220
Ammonium Thiocyanate	20	*	210
	50	*	110
Ammonium Thiosulfate	60	*	100
Amyl Acetate	All	N/R	100
Amyl Chloride	100	*	120
Aniline	100	N/R	N/R
Aniline Hydrochloride	All	*	180
Aniline Sulfate, saturated	20	150	*
	All	75	210
Antimony Trichloride	All	75	*
Aqua Regia (3:1 HCl-HNO3)	All	*	N/R
Arsenic Acid	80	*	100
Arsenious Acid	20	150	180
Arsenious Acid	100	150	*
B			
Barium Acetate	All	*	180
Barium Bromide	All	*	180
Barium Carbonate	All	175	220
Barium Chloride	All	75	210
Barium Cyanide	All	*	150
Barium Hydroxide	10	N/R	150
Barium Sulfate	All	*	220
Barium Sulfide	All	N/R	180
Beet Sugar Liquor	All	*	180
Benzaldehyde	100	N/R	N/R
Benzene	100	75	100
Benzene, HCl (Wet)	All	*	N/R
Benzene Sulfonic Acid	30	*	210
	100	75	*
Benzene Vapor	All	*	N/R
Benzoic Acid	All	150	210
Benzoquinones	All	*	180
Benzyl Alcohol	All	*	100
Benzyl Chloride	100	*	80
Black Liquor (Pulp Mill)	All	*	180
Bleach Solutions			
Calcium Hypochlorite	10	75	180
Chlorine Dioxide	—	*	160
Chlorine Water	Sat'd	75	180
Chlorite	50	*	100
Hydrosulfite	—	*	180
Sodium Hypochlorite6	15	N/R	125
Borax	All	*	210
Boric Acid	All	*	210
Brake Fluid	—	*	110
Brine	All	*	210
Bromine	Liquid	N/R	N/R
Bromine Water	5	*	180
Brown Stock (Pulp Mill)	—	*	180
Bunker C Fuel Oil	100	*	210
Butanol	All	*	120
Butyl Acetate	100	*	80
Butyl Acrylate	100	*	80
Butyl Amine	All	*	N/R
Butyl Benzoate	100	*	100
Butyl Benzyl Phthalate	100	*	180
Butyl Carbitol	80	*	100

Chemical Environment	Concen-tration %	Max. Recommended Temp. PolyDyn °F	Poly-Champion °F	Chemical Environment	Concen-tration %	Max. Recommended Temp. PolyDyn °F	Poly-Champion °F
Butyl Cellosolve	100	*	100	Cobalt Naphthenate	All	*	150
Butyl Hypochlorite	98	N/R	N/R	Cobalt Octoate	All	*	150
Butylene Glycol	100	*	180	Cobalt Nitrate	15	*	120
Butylene Oxide	100	N/R	N/R	Coconut Oil	All	*	190
Butyraldehyde	100	*	100	Copper Chloride	All	*	220
Butyric Acid	25	150	*	Copper Cyanide	All	175	210
Butyric Acid	100	75	*	Copper Nitrate	All	175	210
C				Copper Sulfate	All	175	220
Cadmium Chloride	All	*	180	Corn Oil	All	*	200
Calcium Bisulfite	All	*	180	Corn Starch	All	*	210
Calcium Bromide	All	*	200	Corn Sugar	All	*	210
Calcium Carbonate	All	*	180	Cottonseed Oil	All	*	210
Calcium Chlorate	All	150	220	Cresol	10	*	N/R
Calcium Chloride	Sat'd	150	220	Cresylic Acid	All	*	N/R
Calcium Hydroxide	5	100	180	Crude Oil, Sour or Sweet	100	*	210
	All	*	180	Cyclohexane	100	*	150
Calcium Hypochlorite	10	75	180	Cyclohexanone	100	*	N/R
	All	*	180	**D**			
Calcium Nitrate	All	*	210	Decanol	100	*	180
Calcium Sulfate	All	150	220	Dechlorinated Brine Storage	All	*	180
Calcium Sulfite	All	*	180	Detergents, Organic	100	*	160
Camphor	100	75	*	Detergents, Sulfonated	All	*	200
Cane Sugar Liquor/Sweet Water	All	*	180	Diallylphthalate	All	175	210
Capric Acid	All	*	110	Diammonium Phosphate	65	*	210
Caprylic Acid (Octanoic Acid)	All	*	190	Dibromophenol	—	*	N/R
Carbon Dioxide	100	150	*	Dibromopropanol	All	*	N/R
Carbon Dioxide Gas	—	*	300	Dibutyl Ether	100	*	150
Carbon Disulfide	100	N/R	N/R	Dibutyl Phthalate	100	175	200
Carbon Monoxide	All	175	*	Dibutyl Sebacate	All	*	200
Carbon Monoxide Gas	—	*	300	Dichlorobenzene	100	N/R	100
Carbon Tetrachloride	100	N/R	100	Dichloroethane	100	N/R	N/R
Carbowax®	100	*	120	Dichloroethylene	100	N/R	N/R
Carbowax® Polyethylene Glycols	All	*	150	Dichloromethane	100	N/R	N/R
Carboxy Ethyl Cellulose	10	*	150	Dichloropropane	100	*	N/R
Carboxy Methyl Cellulose	10	*	150	Dichloropropene	100	*	N/R
Castor Oil	All	*	160	Dichloropropionic Acid	100	*	N/R
Chlorinated Pulp	—	*	180	Diesel Fuel	100	*	200
Chlorinated Washer Hoods	—	*	180	Diethanol Amine	100	*	100
Chlorinated Waxes	All	*	180	Diethyl Amine	100	*	N/R
Chlorine (Liquid)	100	*	N/R	Diethyl Ether (Ethyl Ether)	100	N/R	N/R
Chlorine Gas (Wet or Dry)		*	210	Diethyl Formamide	100	*	N/R
Chlorine Dioxide6	Sat'd	*	160	Diethyl Ketone	100	*	N/R
Chlorine Water	All	75	180	Diethyl Maleate	100	*	N/R
Chloroacetic Acid	25	*	120	Diethylenetriamine (DETA)	100	*	N/R
	50	N/R	100	Diethylene Glycol	100	175	200
Chlorobenzene	100	N/R	80	Diisobutyl Ketone	100	*	110
Chloroform	100	N/R	N/R	Diisobutyl Phthalate	100	*	150
Chloropyridine	100	*	N/R	Diisobutylene	100	*	100
Chlorosulfonic Acid	All	*	N/R	Diisopropanol Amine	100	*	120
Chloroethylene				Dimethyl Formamide	100	N/R	N/R
(1,1,1-trichloroethylene)	All	N/R	N/R	Dimethyl Phthalate	100	*	150
Chlorotoluene	100	*	N/R	Dioctyl Phthalate	100	*	180
Chromic Acid	5	*	110	Dioxane	100	N/R	N/R
	10	75	*	Diphenyl Ether	100	*	100
	20	N/R	N/R	Dipropylene Glycol	100	175	210
Chromium Sulfate	All	150	150	Divinyl Benzene	100	*	120
Chromous Sulfate	All	*	150	**E**			
Citric Acid	All	150	220	Embalming Fluid	All	*	110
Cobalt Chloride	All	*	180	Epichloroydrin	100	*	N/R
Cobalt Citrate	12	*	180	Epoxydized Soya Bean Oil	All	*	150

Chemical Environment	Concen-tration %	Max. Recommended Temp. PolyDyn °F	Poly-Champion °F
Esters of Fatty Acids	100	*	180
Ethanol Amine	100	*	80
Ethyl Acetate	100	*	N/R
Ethyl Acrylate	100	N/R	N/R
Ethyl Alcohol (Ethanol)	10	*	150
	50	*	150
	95-100	*	100
Ethyl Benzene	100	*	100
Ethyl Benzene/Benzene Blends	100	*	N/R
Ethyl Bromide	100	N/R	N/R
Ethyl Chloride	100	175	N/R
Ethyl Ether (Diethyl Ether)	100	*	N/R
Ethylene Chloride	100	N/R	*
Ethylene Chloroformate	100	*	N/R
Ethylene Chlorohydrin	100	N/R	100
Ethylene Diamine	100	N/R	N/R
Ethylene Diamine			
Tetra Acetic Acid	100	*	100
Ethylene Dibromide	All	*	N/R
Ethylene Dichloride	100	N/R	N/R
Ethylene Glycol	All	175	200
Ethylene Glycol			
Monobuytl Ether	100	*	100
Ethylene Oxide	100	*	N/R
Eucalyptus Oil	100	*	140
F			
Fatty Acids	All	N/R	220
Ferric Acetate	All	175	180
Ferric Chloride	All	175	210
Ferric Nitrate	All	175	210
Ferric Sulfate	All	175	210
Ferrous Chloride	All	175	210
Ferrous Nitrate	All	175	210
Ferrous Sulfate	All	175	210
Fertilizer, 8,8,8,	—	*	120
Fertilizer, URAN	—	*	120
Fluoboric Acid	10	*	220
Fluosilicic Acid	10	*	150
	35	N/R	100
	Fumes	*	180
Formaldehyde	44	N/R	150
Formic Acid	10	*	180
	50	N/R	100
Freon® 11	100	*	100
Fuel Oil	100	*	180
Furfural	10	*	100
Furfural	100	N/R	N/R
G			
Gallic Acid	Sat'd	*	100
Gasoline			
Regular Leaded8	100	*	110
Regular Unleaded8	100	*	100
Alcohol-Containing8	100	*	100
Gluconic Acid	50	*	180
Glucose	100	*	210
Glutaric Acid	50	*	120
Glycerine	100	175	210
Glycolic Acid	10	*	200
(Hydroxyacetic Acid)	35	*	140

Chemical Environment	Concen-tration %	Max. Recommended Temp. PolyDyn °F	Poly-Champion °F
Glycolic Acid (cont'd)	70	*	100
Glyoxal	40	*	100
Green Liquor (Pulp Mill)	—	*	180
H			
Heptane	100	*	210
Hexachlorocyclopentadiene	100	*	110
Hexane	100	*	150
Hydraulic Fluid	100	*	180
Hydrazine	100	N/R	N/R
Hydrobromic Acid	18	*	180
	48	N/R	150
Hydrochloric Acid	10	175	210
	15	*	210
	25	*	160
	37	*	110
Hydrocyanic Acid	10	*	180
Hydrofluoric Acid	1	*	125
Hydrofluoric Acid	10	*	125
Hydrofluoric Acid	20	*	100
Hydrofluosilicic Acid	10	*	150
	35	*	100
Hydrogen Bromide, gas	100	*	180
Hydrogen Chloride, dry gas	100	*	210
Hydrogen Fluoride, gas	All	*	150
Hydrogen Peroxide	5	*	150
	30	N/R	100
Hydrogen Sulfide, gas	All	75	210
Hydroiodic Acid	10	*	150
Hypophosphorus Acid	50	*	120
I			
Iodine, Solid	All	*	150
Isoamyl Alcohol	100	*	120
Isobutyl Alcohol	All	*	120
Isodecanol	All	*	180
Isononyl Alcohol	100	*	140
Isooctyl Adipate	100	*	130
Isooctyl Alcohol	100	*	140
Isopropyl Alcohol	All	*	120
Isopropyl Amine	100	*	120
Isopropyl Myristate	100	*	200
Isopropyl Palmitate	100	*	210
Itaconic Acid	All	*	120
J-K			
Jet Fuel	100	175	180
Jojoba Oil	100	*	180
Kerosene	100	175	180
L			
Lactic Acid	All	Boil	210
Latex	All	*	150
Lauric Acid	All	*	210
Lauryl Alcohol	100	*	180
Lauryl Mercaptan	All	*	150
Lead Acetate	All	175	210
Lead Chloride	All	175	220
Lead Nitrate	All	175	220
Levulinic Acid	All	*	220
Lime Slurry	All	175	170
Linseed Oil	All	150	220
Lithium Bromide	Sat'd	*	220

Chemical Environment	Concen-tration %	Max. Recommended Temp. PolyDyn °F	Max. Recommended Temp. Poly-Champion °F
Lithium Carbonate	All	*	150
Lithium Chloride	Sat'd	*	210
Lithium Sulfate	All	*	210
M			
Magnesium Bicarbonate	All	*	180
Magnesium Bisulfite	All	*	180
Magnesium Carbonate	15	175	180
Magnesium Chloride	All	175	220
Magnesium Hydroxide	100	*	210
Magnesium Nitrate	All	175	210
Magnesium Sulfate	All	175	210
Magnesium Silica Fluoride	37.5	*	140
Maleic Acid	100	N/R	210
Maleic Anhydride	100	*	210
Manganese Chloride	All	*	210
Manganese Sulfate	All	*	220
Mercuric Chloride	All	175	210
Mercurous Chloride	All	*	210
Mercury	—	*	220
Methyl Bromide (Gas)	10	*	80
Methyl Chloride	100	175	*
Methyl Ethyl Ketone	20	*	N/R
Methyl Isobutyl Ketone	100	*	N/R
Methyl Methacrylate	All	*	N/R
Methyl Styrene	100	*	N/R
Methylene Chloride	100	N/R	N/R
Mineral Oils	100	*	210
Molasses and Invert Molasses	All	*	110
Molybdic Acid	25	*	150
Monochloroacetic Acid	80	N/R	N/R
Monochlorobenzene	100	*	N/R
Monoethanolamine	100	*	80
Monomethylhydrazine	100	N/R	N/R
Morpholine	100	*	N/R
Motor Oil	100	*	210
Myristic Acid	All	*	210
N			
Naphtha, Aliphatic	100	175	200
Naphtha, Aromatic	100	*	120
Naphthalene	100	100	200
Nickel Chloride	All	175	210
Nickel Nitrate	All	175	210
Nickel Sulfate	All	175	210
Nicotinic Acid (Niacin)	All	N/R	*
Nitric Acid	2	*	180
	5	N/R	160
	15	N/R	130
	35	N/R	120
	50	N/R	N/R
	Fumes	*	*
Nitrobenzene	100	*	N/R
Nitrogen Tetroxide	100	*	N/R
O			
Octylamine, Tertiary	100	*	110
Oil Sweet or Sour Crude	100	*	210
Oleic Acid	All	175	200
Oleum (Fuming Sulfuric Acid)	—	N/R	N/R
Olive Oil	100	*	210
Orange Oil (Limonene)	100	*	210
Oxalic Acid	100	175	210

Chemical Environment	Concen-tration %	Max. Recommended Temp. PolyDyn °F	Max. Recommended Temp. Poly-Champion °F
P			
Palm Oil	100	*	210
Palmitic Acid	100	*	220
Pentasodium Tripoly Phosphate	10	*	200
Perchloroethylene	100	N/R	110
Perchloric Acid	10	N/R	150
	30	N/R	100
Phenol (Carbolic Acid)	5	*	N/R
	>5	*	N/R
Phenol Formaldehyde Resin	All	*	120
Phosphoric Acid	80	*	210
Phosphoric Acid			
Vapor & Condensate	—	*	200
Phosphorous Trichloride	—	N/R	N/R
Phthalic Acid	100	*	210
Phthalic Anhydride	100	*	210
Picric Acid (Alcoholic)	10	*	110
Pine Oil	100	*	*
Pine Oil Disinfectant	All	*	*
Polyphosphoric Acid (115%)	—	*	210
Polyvinyl Acetate Adhesive	All	*	120
Polyvinyl Acetate Emulsion	All	*	140
Polyvinyl Alcohol	All	*	120
Potassium Aluminum Sulfate	All	*	220
Potassium Bicarbonate	10	*	150
Potassium Carbonate	10	*	150
	50	*	110
Potassium Chloride	All	175	210
Potassium Dichromate	All	175	210
Potassium Ferricyanide	All	*	210
Potassium Ferrocyanide	All	*	210
Potassium Hydroxide	10	N/R	150
	25	N/R	110
Potassium Iodide	All	*	150
Potassium Nitrate	All	175	210
Potassium Permanganate	All	*	210
Potassium Persulfate	All	175	210
Potassium Pyrophosphate	60	*	150
Potassium Sulfate	All	175	210
Propionic Acid	20	*	200
	50	*	180
Propylene Glycol	All	175	210
i-Propyl Palmitate	All	*	210
Pyridine	100	N/R	N/R
Q-R			
Quaternary Ammonium Salts	All	*	*
Rayon Spin Bath	—	*	140
Refinery Crudes	All	175	*
S			
Salicylic Acid	All	*	150
Selenious Acid	All	*	210
Silver Cyanide	All	*	200
Silver Nitrate	All	175	210
Sodium Acetate	All	175	210
Sodium Alkyl Aryl Sulfonates	All	*	180
Sodium Aluminate	All	*	120
Sodium Benzoate	100	175	180
Sodium Bicarbonate	All	*	180
Sodium Bisulfate	All	175	210
Sodium Bisulfite	Sat'd	*	210

Chemical Environment	Concen-tration %	Max. Recommended Temp. PolyDyn °F	Max. Recommended Temp. Poly-Champion °F
Sodium Borate	Sat'd	*	210
Sodium Bromate	5	*	110
Sodium Bromide	All	175	210
Sodium Carbonate	10	*	180
(Soda Ash)	35	*	160
Sodium Chlorate	50	*	210
Sodium Chloride	All	175	210
Sodium Chlorite	10	*	160
	50	*	100
Sodium Chromate	50	*	210
Sodium Citrate	All	175	*
Sodium Cyanide	5	*	210
Sodium Dichromate	100	*	210
Sodium Diphosphate	100	*	210
Sodium Ferricyanide	All	*	210
Sodium Ferrocyanide	All	175	210
Sodium Fluoride	All	*	180
Sodium Fluorosilicate	All	*	120
Sodium Hexametaphosphate	10	*	150
Sodium Hydrosulfide	20	*	170
Sodium Hydroxide	1	*	140
	5	*	140
	10	N/R	140
	25	*	140
Sodium Hypochlorite5,6	15	*	125
]	All	*	210
Sodium Nitrate	All	175	210
Sodium Nitrite	All	175	210
Sodium Oxalate	All	*	180
Sodium Polyacrylate	25	*	150
Sodium Silicate, pH<12	100	*	210
Sodium Silicate, pH>12	100	*	210
Sodium Sulfate	All	175	210
Sodium Sulfide	All	*	210
Sodium Sulfite	All	175	210
Sodium Thiocyanate	57	*	180
Sodium Thiosulfate	All	*	180
Sodium Triphosphate	All	*	210
Sorbitol	All	*	180
Soybean Oil	All	*	210
Stannic Chloride	All	*	210
Stannous Chloride	All	*	210
Stearic Acid	All	175	210
Styrene	100	*	N/R
Styrene Acrylic Emulsion	All	*	120
Succinonitrile, Aqueous	All	*	100
Sucrose	All	*	210
Sulfamic Acid	10	*	210
	25	*	150
Sulfanilic Acid	All	*	210
Sulfite/Sulfate Liquors			
(Pulp Mill)	—	*	200
Sulfonyl Chloride, Aromatic	—	*	N/R
Sulfur Dichloride	—	N/R	*
Sulfur Dioxide (Dry or Wet Gas)	—	*	220
Sulfur Trioxide Gas	—	*	210
Sulfuric Acid	25	*	210
	50	75	180

Chemical Environment	Concen-tration %	Max. Recommended Temp. PolyDyn °F	Max. Recommended Temp. Poly-Champion °F
Sulfuric Acid	70	*	180
	75	*	120
	93	N/R	N/R
	Fumes	*	200
Sulfuric Acid/Ferrous Sulfate	10/Sat'd	*	200
Sulfuric Acid/Phosphoric Acid	10:20	*	180
Sulfuryl Chloride	100	*	N/R
Superphosphoric Acid			
(105% H3PO4)	100	*	210
T			
Tall Oil	All	*	150
Tannic Acid	All	175	210
Tartaric Acid	All	175	210
Tetrachloroethane	100	*	N/R
Tetrachloropentane	100	*	N/R
Tetrachloropyridine	—	*	N/R
Tetrapotassium Pyrophosphate	60	*	125
Tetrasodium Pyrophosphate	5	*	125
	60	*	125
Thioglycolic Acid	10	*	100
Thionyl Chloride	100	N/R	N/R
Tobias Acid (2-Naphthyl-			
amine Sulfonic Acid)	—	*	210
Toluene	100	170	100
	100	N/R	N/R
Toluene Sulfonic Acid	All	*	210
Transformer Oils	100	*	210
Tributyl Phosphate	100	*	120
Trichloracetaldehyde	100	*	N/R
Trichloroacetic Acid	50	*	210
Trichloroethane	100	*	N/R
Trichlorophenol	100	*	N/R
Tridecylbenzene Sulfonate	All	*	210
Triethanolamine	100	*	120
Triethylamine	All	*	120
Triethylene Glycol	100	*	180
Trimethylamine Chlorobromide	—	N/R	N/R
Trisodium Phosphate	50	*	175
U-V-W			
Urea	All	*	150
Vegetable Oils	All	*	210
Vinegar	All	*	210
Vinyl Acetate	All	*	N/R
Vinyl Toluene	100	*	80
Water, Deionized	All	*	210
Water, Demineralized	—	*	200
Water, Distilled	All	*	210
Water, Sea	All	*	210
White Liquor (Pulp Mill)	All	*	180
Wine4	All	N/R	*
X-Y-Z			
Xylene	All	*	100
Zinc Chlorate	All	*	210
Zinc Chloride	All	175	210
Zinc Cyanide	All	*	160
Zinc Nitrate	All	175	210
Zinc Sulfate	All	175	210
Zinc Sulfite	All	*	210