



CHEMICAL RESISTANCE CHART

4-1000 (10-05)
Supersedes 4-1000 (5-03)

CHEMPRUF 1000 SERIES

KEY:

- NR = Not recommended
- LS = Limited service
- ◆ = Two coats of appropriate ChemPruf finisher must be applied

Note: Numbers listed under each ChemPruf lining are maximum temperatures in degrees Fahrenheit (°F) for total immersion service in the solutions listed at given concentrations, unless stated otherwise.

The information presented is based on judgements derived from laboratory testing and field service performance. No guarantee of results is made or implied and no liability in connection with this information is assumed. The information presented herein should be supplemented by in-service testing. The data furnished in the tables may be revised on the basis of further testing.

Note: For FDA applications, use CHEMPRUF 1310

CHEMICAL ENVIRONMENT	CONCENTRATION %	CHEMPRUF 1300	CHEMPRUF 1310	CHEMPRUF 1410	CHEMPRUF 1420
Acetaldehyde	100	NR	NR	NR	NR
Acetic Acid	10	180	160	180	160
Acetic Acid	15	160	150	160	150
Acetic Acid	25	160	150	160	150
Acetic Acid	50	125	140	160	140
Acetic Acid	75	80	80	100	80
Acetic Acid, Glacial	100	LS/80	NR	80	NR
Acetone	100	NR	NR	NR	NR
Acetonitrile	100	NR	NR	NR	NR
Acetophenone	100	NR	NR	NR	NR
Acetyl Chloride	100	NR	NR	NR	NR
Acrylamide	50	80	NR	100	80
Acrylic Acid	10	100	100	100	100
Acrylic Acid	25	100	90	100	100
Acrylic Acid	100	NR	NR	100	NR
Acrylonitrile	100	NR	NR	NR	NR
Allyl Chloride	100	NR	NR	NR	NR
Alum	all	180	160	180	160
Alum, Potassium	all	180	160	180	160
Aluminum Chloride	all	180	160	180	160
Aluminum Nitrate	all	180	160	180	160
Aluminum Sulfate	all	180	160	180	160
Aminoethyl Piperazine	100	NR	NR	NR	NR
Ammonia, Dry	gas	90	90	100	100
Ammonia, Liquefied Gas	—	NR	NR	NR	NR
Ammonium Bicarbonate	10	120	160	160	160
Ammonium Bicarbonate	15	100	150	160	160
Ammonium Bicarbonate	20	NR	150	160	160
Ammonium Bicarbonate	saturated	NR	120	140	120
Ammonium Bisulfite Liquor	—	160	140	160	140
Ammonium Carbonate	10	NR	140	140	140
Ammonium Carbonate	30	NR	140	140	140

CHEMICAL ENVIRONMENT	CONCENTRATION %	CHEMPRUF 1300	CHEMPRUF 1310	CHEMPRUF 1410	CHEMPRUF 1420
Ammonium Carbonate	saturated	NR	140	140	140
Ammonium Chloride	saturated	160	140	160	140
Ammonium Fluoride	all	NR	NR	NR	NR
Ammonium Hydroxide	5	NR	160	180	160
Ammonium Hydroxide	10	NR	140	150	140
Ammonium Hydroxide	20	NR	120	130	120
Ammonium Hydroxide	28	NR	100	100	100
Ammonium Nitrate	saturated	160	140	160	140
Ammonium Phosphate, Dibasic	saturated	150	160	180	160
Ammonium Phosphate, Monobasic	saturated	150	160	180	160
Ammonium Sulfate	saturated	180	160	180	160
Ammonium Sulfide	25	NR	80	120	80
Ammonium Sulfite	10	NR	80	130	100
Ammonium Thiocyanate	20	180	160	180	160
Ammonium Thiocyanate	saturated	160	120	120	120
Amyl Acetate	all	80	NR	80	NR
Amyl Alcohol	all	150	140	160	120
Aniline Sulfate	saturated	160	140	160	140
Antimony Pentachloride	100	80	80	80	80
Antimony Trichloride	saturated	160	140	160	140
Barium Carbonate	—	180	160	180	160
Barium Chloride	all	180	160	180	160
Barium Hydroxide	10	NR	140	140	130
Barium Hydroxide	saturated	NR	150	150	150
Barium Sulfate	—	180	160	180	160
Barium Sulfide	saturated	NR	140	160	130
Beer	—	80	80	80	80
Benzaldehyde	100	NR	NR	70	NR
Benzene	100	90	NR	80	NR
Benzene Sulfonic Acid	30	160	140	160	140
Benzene Sulfonic Acid	saturated	80	120	160	120
Benzoic Acid	saturated	180	160	180	160
Benzyl Alcohol	100	NR	NR	80	NR
Benzyl Chloride	100	NR	NR	LS	NR
Black Liquor, pH > 7	—	NR	150	160	150
Bleach Reactor - 6% Sodium Hypochlorite	—	140	160	180	160
Borax	saturated	180	160	180	160
Boric Acid	saturated	180	160	180	160
Brine, Salt	saturated	180	160	180	160
Bromine, Dry	gas	90	90	100	90
Bromine Fumes	—	90	90	100	90
Bromine, Liquid	—	NR	NR	NR	NR
Bromine Water	saturated	NR	75	75	75
Bromine:Water	5:95	NR	140	160	140
Bromine, Wet Gas	100	90	90	90	90
Butyl Acetate	100	80	NR	80	NR
Butyl Alcohol	100	80	80	100	80
Butyl Carbitol	100	80	NR	80	NR
Butyl Cellosolve	100	80	80	80	80

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CHEMICAL ENVIRONMENT	CONCENTRATION %	CHEMPRUF 1300	CHEMPRUF 1310	CHEMPRUF 1410	CHEMPRUF 1420
Butyl Ether	100	80	80	80	80
Butylamine	100	NR	NR	NR	NR
Butylene Glycol	100	140	140	160	140
Butyric Acid	25	120	100	160	120
Butyric Acid	50	80	120	160	100
Butyric Acid	70	80	80	160	100
Butyric Acid	100	80	80	120	80
Calcium Bisulfite	saturated	NR	160	160	140
Calcium Carbonate	saturated	NR	160	180	160
Calcium Chlorate	saturated	180	160	180	160
Calcium Chloride	saturated	180	160	180	160
Calcium Hydroxide	15	NR	140	160	140
Calcium Hydroxide	25	NR	160	180	160
Calcium Hydroxide	saturated	NR	160	180	160
Calcium Hypochlorite	saturated	120	120	180	160
Calcium Nitrate	saturated	180	160	180	160
Calcium Sulfate	saturated	180	160	180	160
Caprylic Acid	saturated	140	160	180	160
Carbon Dioxide, Wet, Acidic	—	180	160	180	160
Carbon Disulfide	100	NR	NR	NR	NR
Carbon Monoxide, Gas	—	180	160	180	160
Carbon Tetrachloride	100	100	NR	160	NR
Carbonic Acid	saturated	140	90	110	110
Castor Oil	100	160	140	160	140
Chlorine Dioxide	5	150	150	150	150
Chlorine Dioxide Process Bleach Towers	—	180	150	180	160
Chlorine Dioxide Retention Towers	—	180	150	180	160
Chlorine Dioxide, Wet	saturated	180	150	180	160
Chlorine Gas, Dry	100	160	140	160	140
Chlorine Gas, Wet	100	160	140	160	140
Chlorine Water	saturated	180	160	180	160
Chloroacetic Acid	25	110	110	150	150
Chloroacetic Acid	50	90	90	100	100
Chloroacetic Acid	concentrated	NR	NR	NR	NR
Chlorobenzene	100	NR	NR	80	NR
Chloroform, Liquid	100	NR	NR	NR	NR
Chlorosulfonic Acid	100	NR	NR	NR	NR
Chlorotoluene (o)	100	NR	NR	80	NR
Chromic Acid	5	160	NR	150	110
Chromic Acid	10	160	NR	150	80
Chromic Acid	20	120	NR	80	NR
Chromic Acid	30	120	NR	NR	NR
Chromic Acid	40	120	NR	NR	NR
Chromic Acid	50	100	NR	NR	NR
Chromic Acid	saturated	80	NR	NR	NR
Chromic:Nitric:Hydrofluoric Acids	5:2:3	NR	NR	NR	NR
Chromic:Phosphoric:Hydrofluoric Acids	7:40:2	NR	NR	NR	NR
Chromic:Sulfuric Acids	40:0.4 oz./gal.	120	NR	NR	NR
Chromic:Sulfuric Acids	53:0.53 oz./gal.	120	NR	NR	NR
Chromic:Sulfuric Acids	3:16	120	NR	NR	NR

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Chromic:Sulfuric:Hydrofluosilicic Acids (Chrome Plating)	45:0.3:0.5 oz./gal.	NR	NR	NR	NR
Citric Acid	all	180	160	180	160
Coconut Oil	100	180	160	180	160
Copper Acetate	all	160	140	160	140
Copper Chloride	all	160	140	160	140
Copper Cyanide	all	160	140	160	140
Copper Nitrate	all	160	140	160	140
Corn Oil	100	180	160	180	160
Corn Starch	slurry	180	160	180	160
Cottonseed Oil	100	180	160	180	160
Cresylic Acid	100	NR	NR	NR	NR
Cyclohexane	100	120	NR	120	100
Diallylphthalate	100	80	140	160	140
Dibutyl Ether	100	NR	NR	120	NR
Dibutyl Phthalate	100	80	140	160	140
Dichlorobenzene	100	NR	NR	NR	NR
1,2-Dichloroethane	100	NR	NR	NR	NR
Dichloroethylene	100	NR	NR	NR	NR
Dichloromethane	100	NR	NR	NR	NR
Dichlorophenol	100	NR	NR	NR	NR
Diesel Fuel	100	150	140	160	140
Diethanolamine	100	100	100	110	100
Diethyl Benzene	100	80	NR	120	80
Diethyl Ether	100	LS/80	NR	NR	NR
Diethyl Sulfate	100	80	NR	110	NR
Diethylene Glycol	100	160	140	160	140
Diethylene Triamine	100	NR	NR	NR	NR
Diisobutyl Phthalate	100	80	NR	120	80
Dimethyl Phthalate	100	80	120	130	100
Dimethyl Sulfoxide	100	NR	NR	NR	NR
Diocetyl Phthalate	100	NR	120	130	100
Diphenyl Ether	100	NR	NR	100	NR
Dipropylene Glycol	100	160	140	160	140
Divinyl Benzene	100	80	NR	110	NR
Dodecyl Alcohol	100	80	120	140	120
Ethanolamine	100	NR	NR	80	NR
Ethyl Acetate	100	NR	NR	NR	NR
Ethyl Acrylate	100	NR	NR	NR	NR
Ethyl Alcohol	50	120	100	130	100
Ethyl Alcohol	95	100	100	100	80
Ethyl Benzene	100	NR	NR	80	NR
Ethyl Bromide	100	NR	NR	NR	NR
Ethyl Chloride	100	NR	NR	NR	NR
Ethyl Ether	100	NR	NR	NR	NR
Ethyl Sulfate	100	80	NR	80	NR
Ethylene Dichloride	100	NR	NR	NR	NR
Ethylene Glycol	100	160	140	160	140
Ethylene Glycol Monobutyl Ether	100	80	80	80	80
Ethylenediamine Tetra Acetic Acid	35	80	80	100	80

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Ethylenediamine Tetra Acetic Acid	100	80	80	100	80
Ferric Chloride, Nitrate, Sulfate	all	160	140	160	140
Ferrous Chloride, Nitrate, Sulfate	all	160	140	160	140
Fluoboric Acid	10	NR	NR	NR	NR
Fluoboric Acid	25	NR	NR	NR	NR
Fluosilicic Acid	10	NR	NR	NR	NR
Fluosilicic Acid	25	NR	NR	NR	NR
Fluosilicic Acid	35	NR	NR	NR	NR
Formaldehyde	25	160	120	120	120
Formaldehyde	37	150	110	120	110
Formaldehyde	50	130	90	110	100
Formamide	100	80	100	100	100
Formic Acid	10	160	140	160	140
Formic Acid	25	140	120	120	120
Formic Acid	50	100	90	120	110
Formic Acid	90	100	NR	100	NR
Furfural	5	90	100	150	120
Furfural	10	90	80	120	100
Furfural	50	NR	NR	NR	NR
Furfuryl Alcohol	100	100	NR	80	NR
Glucose	100	160	140	160	140
Glycerine	100	160	140	160	140
Glycolic Acid (See Hydroxyacetic Acid)					
Heptane, Normal	100	160	140	160	140
Hexamethylenetetramine	40	NR	80	100	80
Hexane	100	140	140	140	140
Hydraulic Fluid, Skydrol 500	100	140	140	160	140
Hydrazine	70	NR	NR	NR	NR
Hydriodic Acid	40	140	120	130	120
Hydrobromic Acid	18	100	140	160	140
Hydrobromic Acid	25	160	140	160	140
Hydrobromic Acid	48	140	130	130	130
Hydrochloric Acid	10	160	140	160	140
Hydrochloric Acid	15	160	130	160	140
Hydrochloric Acid	20	160	130	160	130
Hydrochloric Acid	37	80	90	160	130
Hydrocyanic Acid	saturated	160	140	160	140
Hydrofluoric Acid	10	NR	NR	NR	NR
Hydrofluoric Acid	15	NR	NR	NR	NR
Hydrofluoric Acid	20	NR	NR	NR	NR
Hydrofluoric Acid	25	NR	NR	NR	NR
Hydrofluoric Acid	40	NR	NR	NR	NR
Hydrofluoric:Nitric Acids	5:15	NR	NR	NR	NR
Hydrofluosilicic Acid	10	NR	NR	NR	NR
Hydrofluosilicic Acid	35	NR	NR	NR	NR
Hydrogen Bromide, Dry	100	160	140	160	140
Hydrogen Bromide, Wet	100	160	140	160	140
Hydrogen Peroxide	5	150	90	150	130
Hydrogen Peroxide	30	100	90	120	90
Hydrogen Peroxide	35	80	80	100	90

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Hydrogen Peroxide	50	80	NR	NR	NR
Hydrogen Sulfide	all	160	120	160	140
Hydroxyacetic Acid	35	140	120	160	140
Hydroxyacetic Acid	70	90	90	90	90
Hypochlorous Acid	20	90	90	110	90
Hypochlorous Acid	concentrated	80	NR	80	NR
Isobutyl Alcohol	100	100	100	100	80
Isopropyl Alcohol	all	90	90	120	110
Isopropyl Amine	100	90	90	120	100
Jet Fuel (JP-4)	100	140	90	160	140
Kerosene	100	140	140	160	140
Lactic Acid	all	160	140	160	140
Lauryl Alcohol	100	100	100	160	140
Lead Acetate	all	140	140	160	140
Lead Chloride	saturated	180	160	180	180
Lead Nitrate	saturated	180	160	180	160
Levulinic Acid	saturated	160	140	160	140
Linoleic Acid	100	160	140	160	140
Linseed Oil	100	160	140	160	140
Lithium Bromide	all	160	140	160	140
Lithium Carbonate	saturated	NR	160	180	160
Lithium Chloride	all	180	160	180	160
Lithium Hydroxide	saturated	NR	140	160	140
Lithium Sulfate	all	180	160	180	160
Magnesium Bicarbonate	all	130	140	160	140
Magnesium Bisulfite	all	140	140	160	140
Magnesium Carbonate	saturated	NR	160	180	160
Magnesium Chloride	saturated	180	160	180	160
Magnesium Hydroxide	saturated	NR	160	180	160
Magnesium Nitrate	saturated	180	160	180	160
Magnesium Sulfate	saturated	180	160	180	160
Maleic Acid	all	160	140	160	140
Maleic Anhydride	100	160	140	160	140
Mercuric Chloride	saturated	180	160	180	160
Mercurous Chloride	saturated	180	160	180	160
Mercury	100	180	160	180	160
Metal Plating Solutions: Brass Plating, 3% Copper, 1% Zinc & 5.6% Sodium Cyanides, 3% Sodium Carbonate	—	NR	140	160	140
Bronze Plating, 4% Copper, 5% Sodium Cyanides, 3% Sodium Carbonate, 4.5% Rochelle Salts	—	NR	140	160	140
Cadmium Cyanide Bath, 3% Cadmium Oxide, 10% Sodium Cyanides, 1.2% Sodium Hydroxide	—	NR	140	160	140
Chrome Bath, 19% Chromic Acid with Sodium Fluosilicate & Sulfate	—	NR	NR	NR	NR

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Copper Cyanide Bath, 10.5% Copper & 14% Sodium Cyanides, 6% Rochelle Salts	—	NR	140	160	140
Copper Matte Dipping Bath, 30% FeCl ₃ , 19% Hydrochloric Acid	—	160	140	160	140
Copper Plating, 45% Cu(BF ₄) ₂ , 19% Copper Sulfate, 8% Sulfuric Acid	—	NR	NR	NR	NR
Gold Plating, 23% Potassium Ferrocyanide with Potassium Gold Cyanide & Sodium Cyanide	—	NR	140	160	140
Iron Plating, 45% FeCl ₂ , 15% CaCl ₂ , 20% FeSO ₄ , 11% (NH ₄) ₂ SO ₄	—	160	140	160	140
Lead Plating, Acid, 8% Lead, with Fluoboric & Boric Acids	—	NR	NR	NR	NR
Lead Plating, Alkaline, 8% Pb (C ₂ H ₃ O) ₂ Sodium Hydroxide	—	NR	140	160	140
Nickel Plating, (Nickel Sulfamate, Magnesium Chloride:Boric Acid) pH 3.7	—	160	140	160	140
Nickel Plating, 11% Nickel Sulfate, 2% Nickel Chloride, 1% Boric Acid	—	160	140	160	140
Nickel Plating, 44% Nickel Sulfate, 4% Ammonium Chloride, 4% Boric Acid	—	160	140	160	140
Silver Plating, 4% Silver, 7% Potassium & 5% Sodium Cyanides, 2% Potassium Carbonate	—	NR	140	160	140
Tin Fluoborate Bath, 18% Stannous Fluoborate, 7% Tin, 9% Fluorboric Acid, 2% Boric Acid	—	NR	NR	NR	NR
Zinc Cyanide Bath, 9% Zinc & 4% Sodium Cyanides, 9% Sodium Hydroxide	—	NR	140	160	140
Methacrylic Acid	10	100	100	100	100
Methacrylic Acid, Glacial	100	90	NR	90	NR
Methyl Alcohol	100	90	90	90	NR
Methyl Chloride	100	NR	NR	NR	NR
Methyl Chloroform (See 1,1,1-Trichloroethane)					
Methyl Isobutyl Ketone	100	NR	NR	NR	NR
Methyl Methacrylate	100	NR	NR	110	110
Methylene Chloride	100	NR	NR	NR	NR
Mineral Oil	100	160	140	160	140
Muriatic Acid (See Hydrochloric Acid)					
Myristic Acid	100	160	140	160	140
Naphtha	100	160	130	160	130
Naphthalene	100	90	140	160	140
Nickel Chloride	saturated	180	160	180	160
Nickel Nitrate	saturated	180	160	180	160
Nickel Sulfate	saturated	180	160	180	160
Nitric Acid	2	160	140	160	140

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Nitric Acid	5	160	140	160	140
Nitric Acid	10	160	130	140	130
Nitric Acid	20	120	100	130	100
Nitric Acid	35	120	90	90	NR
Nitric Acid	40	120	NR	80	NR
Nitric Acid	50	120	NR	NR	NR
Nitric Acid	60	80	NR	LS/80	NR
Nitric:Hydrochloric Acids	10:10	120	100	120	100
Nitric:Hydrochloric Acids	5:20	120	100	120	100
Nitric:Hydrochloric:Hydrofluoric Acids	10:77:13	NR	NR	NR	NR
Nitric:Hydrofluoric:Chromic Acids	2:3:6	NR	NR	NR	NR
Nitric:Sulfuric Acids	15:15	160	NR	NR	NR
Nitric Acid Vapor	—	160	140	160	140
Nitrobenzene	100	NR	NR	100	NR
Nitromethane	100	80	NR	80	NR
Nitrous Acid	10	90	80	90	80
Nonyl Phenol	100	100	100	110	100
Octanoic Acid (See Caprylic Acid)					
Oil, Sour Crude	100	160	140	160	140
Oil, Sweet Crude	100	160	140	160	140
Oleic Acid	100	160	140	160	140
Oleum (Fuming Sulfuric Acid)	—	NR	NR	NR	NR
Olive Oil	100	120	140	160	140
Oxalic Acid	all	160	140	160	140
Palmitic Acid	100	160	140	160	140
Peanut Oil	100	160	140	160	140
Perchloric Acid	5	85	85	160	130
Perchloric Acid	10	85	NR	130	100
Perchloric Acid	30	85	NR	100	NR
Perchloroethylene	100	80	NR	100	80
Phenol	2	160	80	100	80
Phenol	5	160	80	100	NR
Phenol	10	100	NR	NR	NR
Phenol	85	NR	NR	NR	NR
Phosphoric Acid	85	160	140	160	140
Phosphoric Acid, Super	100	160	140	160	140
Phosphorous Oxychloride	100	80	NR	NR	NR
Phosphorous Trichloride	100	NR	NR	NR	NR
Phthalic Acid	100	100	140	160	140
Phthalic Anhydride	100	100	140	160	140
Picric Acid (Alcoholic)	10	100	100	100	NR
Polyphosphoric Acid	105	160	140	160	140
Potassium Aluminum Sulfate	all	160	140	160	140
Potassium Bicarbonate	10	90	140	130	130
Potassium Bicarbonate	50	NR	140	160	120
Potassium Bromide	all	NR	100	100	90
Potassium Carbonate	10	NR	130♣	130♣	130♣
Potassium Carbonate	25	NR	110♣	130♣	110♣
Potassium Carbonate	50	NR	100♣	130♣	100♣
Potassium Chloride	all	180	160	180	160

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Potassium Dichromate	all	160	140	160	140
Potassium Ferricyanide	saturated	160	140	160	140
Potassium Ferrocyanide	saturated	160	140	160	140
Potassium Fluoride	saturated	NR	130♣	130♣	130♣
Potassium Hydroxide	10	NR	130♣	130♣	130♣
Potassium Hydroxide	25	NR	100♣	130♣	100♣
Potassium Hydroxide	40	NR	90♣	130♣	100♣
Potassium Hydroxide	50	NR	NR	130♣	100♣
Potassium Nitrate	all	180	160	180	160
Potassium Permanganate	all	130	140	160	140
Potassium Persulfate	all	90	140	160	140
Potassium Pyrophosphate	60	100	100	130	120
Potassium Sulfate	all	160	140	160	140
Propionic Acid	20	140	140	160	140
Propionic Acid	50	100	140	160	140
Propionic Acid	100	NR	NR	80	NR
Propylene Glycol	all	160	140	160	140
Pulp, Bleached	—	140	160	180	160
Pulp Stock, Chlorinated, pH 4.5	—	160	140	160	140
Pyridine	100	NR	NR	NR	NR
Selenious Acid	all	160	140	160	140
Septic System	—	90	90	90	90
Sewage, Anaerobic	—	90	90	90	90
Sewage, Municipal, Treated & Untreated	—	90	90	90	90
Sewage Treatment	—	90	90	90	90
Sewage Treatment, Fumes	—	90	90	90	90
Silver Cyanide	saturated	140	140	160	140
Silver Nitrate	all	160	140	160	140
Sodium Acetate	all	160	140	160	140
Sodium Aluminate	all	NR	130	100	100
Sodium Benzoate	100	140	140	160	140
Sodium Bicarbonate	10	NR	140	160	140
Sodium Bicarbonate	saturated	NR	140	160	140
Sodium Bisulfate	all	180	160	180	160
Sodium Bisulfite	saturated	160	140	160	140
Sodium Borate	saturated	150	140	160	140
Sodium Bromide	all	180	160	180	160
Sodium Carbonate	10	NR	130♣	160♣	130♣
Sodium Carbonate	25	NR	110♣	160♣	130♣
Sodium Carbonate	32	NR	100♣	160♣	130♣
Sodium Carbonate	35	NR	100♣	160♣	130♣
Sodium Carbonate	saturated	NR	100♣	160♣	130♣
Sodium Chlorate	50	160	140	160	140
Sodium Chlorate	100	160	140	160	140
Sodium Chloride	saturated	180	160	180	160
Sodium Chlorite	10	160	130	130	130
Sodium Chlorite	50	130	100	110	100
Sodium Chromate	saturated	160	140	140	140
Sodium Cyanide	10	NR	140	160	140
Sodium Cyanide	15	NR	130	160	130

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CHEMICAL ENVIRONMENT	CONCENTRATION %	CHEMPRUF 1300	CHEMPRUF 1310	CHEMPRUF 1410	CHEMPRUF 1420
Sodium Cyanide	50	NR	110	160	130
Sodium Dichromate	saturated	160	140	160	140
Sodium Ferricyanide	saturated	160	140	160	140
Sodium Ferrocyanide	saturated	160	140	160	140
Sodium Fluoride	all	NR	NR	NR	NR
Sodium Fluorosilicate	all	NR	NR	NR	NR
Sodium Hexametaphosphate	10	NR	100	100	100
Sodium Hydrosulfide	all	140	120	160	140
Sodium Hydroxide	1	NR	130♣	130♣	130♣
Sodium Hydroxide	5	NR	130♣	130♣	130♣
Sodium Hydroxide	10	NR	130♣	130♣	130♣
Sodium Hydroxide	15	NR	130♣	130♣	130♣
Sodium Hydroxide	25	NR	130♣	130♣	130♣
Sodium Hydroxide	50	NR	130♣	130♣	130♣
Sodium Hypochlorite (Stable)	2	120	120	160	130
Sodium Hypochlorite (Stable)	5	120	120	160	130
Sodium Hypochlorite (Stable)	10	110	110	160	130
Sodium Hypochlorite (Stable)	15	100	110	160	130
Sodium Lauryl Sulfate	100	100	100	140	140
Sodium Phosphate, Monobasic	saturated	NR	140	160	140
Sodium Nitrate	saturated	180	160	180	160
Sodium Nitrite	saturated	160	160	180	160
Sodium Persulfate	20	110	120	120	120
Sodium Silicate	all	NR	140	160	140
Sodium Sulfate	all	180	160	180	160
Sodium Sulfide	10	NR	110	160	140
Sodium Sulfide	saturated	NR	100	140	120
Sodium Sulfite	all	160	140	160	140
Sodium Tetraborate	saturated	160	140	160	140
Sodium Thiocyanate	all	NR	140	160	140
Sodium Thiosulfate	all	NR	90	160	130
Sodium Tripolyphosphate	saturated	110	140	160	140
Soya Oil	100	160	140	160	140
Stannic Chloride	all	160	140	160	140
Stannous Chloride	all	160	140	160	140
Styrene	100	NR	NR	110	NR
Sugar, Beet, Liquor	—	160	140	160	140
Sugar, Cane, Liquor	—	160	140	160	140
Sulfamic Acid	25	140	130	130	130
Sulfanilic Acid	all	140	140	160	140
Sulfur Chloride	100	NR	NR	NR	NR
Sulfur Dioxide, Dry or Wet	—	160	140	160	140
Sulfuric Acid	25	160	140	160	140
Sulfuric Acid	50	160	140	160	140
Sulfuric Acid	70	160	140	160	140
Sulfuric Acid	75	150	80	100	90
Sulfuric Acid	80	130	NR	NR	NR
Sulfuric Acid	93	NR	NR	NR	NR
Sulfuric:Chromic Acids	20:20	160	NR	NR	NR
Sulfuric:Chromic Acids	32:20	90	NR	NR	NR

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CHEMICAL ENVIRONMENT	CONCENTRATION %	CHEMPRUF 1300	CHEMPRUF 1310	CHEMPRUF 1410	CHEMPRUF 1420
Sulfuric:Nitric Acids, 50:50	30	160	NR	NR	NR
Sulfuric Acid:Sodium Dichromate	30:3	130	NR	NR	NR
Sulfurous Acid	10	130	90	110	100
Sulfuryl Chloride	100	NR	NR	NR	NR
Tannic Acid	saturated	160	140	160	140
Tartaric Acid	saturated	160	140	160	140
Tetrapotassium Pyrophosphate	60	NR	110	130	110
Tetrasodium Pyrophosphate	60	NR	110	130	110
Thioglycolic Acid	10	100	100	100	NR
Thionyl Chloride	100	NR	NR	NR	NR
Toluene	100	90	NR	120	NR
Toluene Diisocyanate	100	130	NR	NR	NR
Toluene Sulfonic Acid	65	100	140	160	140
Toluene Sulfonic Acid	100	100	140	160	140
Tributyl Phosphate	100	NR	NR	120	100
Trichloroacetic Acid	50	80	140	160	140
Trichlorobenzene	100	NR	NR	NR	NR
1,1,1-Trichloroethane	100	80	NR	80	NR
Trichloroethylene	100	NR	NR	NR	NR
Tricresyl Phosphate	100	NR	NR	140	140
Triethanolamine	100	NR	100	100	100
Triethylamine	100	NR	100	100	100
Triethylene Glycol	100	160	140	160	140
Triphenyl Phosphite	100	100	90	100	90
Trisodium Phosphate	25	NR	140	160	140
Trisodium Phosphate	50	NR	90	160	140
Turpentine, Pure Gum	100	100	90	160	140
Urea	50	100	100	130	100
Vinegar	—	160	140	160	140
Vinyl Acetate	100	NR	NR	NR	NR
Vinyl Toluene	100	80	NR	100	80
Water, Deionized	—	180	160	180	160
Water, Demineralized	—	180	160	180	160
Water, Distilled	—	180	160	180	160
Water, Sea	—	180	160	180	160
Whey	—	130	120	130	130
White Liquor (Pulp Mill)	—	NR	140	160	140
Xylene	100	80	80	100	NR
Zinc Chloride	saturated	180	160	180	160
Zinc Fluoborate	—	NR	NR	NR	NR
Zinc Nitrate	all	180	160	180	160
Zinc Sulfate	all	180	160	180	160

Note: Atlas makes it a practice to continuously update and enhance our CCM (Corrosion Resistant Construction Materials) products. This may result in slight discrepancies between our printed Data Sheets and the current version. For the most recent version of any Data Sheet, please visit our Web site at www.atlasmin.com

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