

### Isophthalic polyester resins

Glass reinforced plastic (GRP) has been used for various types of equipment in the chemical processing industry since the early 1950's. Its use has continued to grow in pulp and paper, power, waste treatment, semi-conductor, metals refining, petrochemical, pharmaceutical, engineering, food and drink processors and many other industries. Process vessels of all shapes and sizes, scrubbers, floor coatings, gratings and tank linings are just a few examples of products made from GRP.

The chief reason for the popularity of these materials is their excellent resistance to corrosion. When choosing the best material for construction, GRP is often chosen due to its:

- Corrosion resistance to a wide range of acids, chlorides and solvents
- Heat resistance
- Electrical and thermal insulation
- High strength to weight ratio
- Low maintenance, rust free equipment
- Ease of installation and repair

The chemicals used in the manufacture of fibreglass grating are constantly evaluated for peak performance. Fibreglass grating is made to strict ISO 9002 standards. All materials used in its manufacture are sourced from ISO9002 registered companies.

When requesting recommendations for corrosion resistant fibreglass grating, users or specifiers should be prepared to supply the following data:

- All chemicals to which the grating will be exposed
- Normal operating temperature, maximum and minimum

- Normal operating concentrations of chemicals including trace amounts
- pH range of the system
- Duration of normal and maximum operating temperatures

Liquid polyester resins are actually polymers dissolved in styrene monomer. The fabricator cures these resins to a solid state by reacting the polymer with the styrene in the presence of glass reinforcements to produce a glass reinforced rigid structure. The standards for these structures are defined by organizations such as ASTM and ASME.

The development and manufacture of resins has been a continuing process since 1954. They have been used to fabricate thousands of different types of corrosion resistant GRP equipment. Many different versions of resin have been developed for ease of handling during hand lay-up, filament winding, pultrusions, moulding and most other methods of commercial fabrication.

Isophthalic polyester resins are a broad class of products of raw isophthalic acid, glycols and maleic anhydride. The specific raw materials are selected to impart desired properties and corrosion resistance. The resins we use in our fibreglass grating will offer good corrosion resistance over a wide pH range.

The temperatures shown are not necessarily the maximum service temperature. It is the upper temperature at which the resin has been tested. It is possible a higher temperature could be obtained but additional testing would be required to establish such performance.

#### Legend:

- NR Not recommended
- LS Limited service life

CHEMICAL ENVIRONMENT	CONC. %	TEMP. °C
Acetaldehyde	100	NR
Acetic acid	50	66
Acetic acid	1	71
Acetic acid	10	71
Acetic acid	15	71
Acetic acid	25	71
Acetic acid, glacial	100	NR
Acetic anhydride	100	NR
Acetone	100	NR
Acetonitrile	100	NR
Acetophenone	100	NR
Acrylic Acid	10	38
Acrylic Acid	100	NR
Acrylonitrile (Latex Dispersion)	100	NR
Adogen 442	100	49
Adogen 448	100	49
Algaecide (phenate Based)	100	52
Allum, Potassium	100	82
Aluminum Chloride	100	77
Aluminum Chlorohydroxide	50	77
Aluminum Fluoride	100	32
Aluminum Hydroxide	20	66
Aluminum Potassium Sulfate	100	82
Aluminum Sulfate	100	82
Amerex 201	100	LS 52

CHEMICAL ENVIRONMENT	CONC. %	TEMP. °C
Amerex 209	100	52
Amine Salts, Organotin (blended)	100	LS 52
Aminoethoxy Ethanol	100	NR
Aminoethyl Piperazine	100	NR
Ammonium Bicarbonate	20	49
Ammonium Bicarbonate	15	54
Ammonium Carbamate	10	NR
Ammonium Carbamate	30	NR
Ammonium Fluoride	100	32
Ammonium Hydroxide	1	LS 32
Ammonium Hydroxide	5	NR
Ammonium Hydroxide	10	NR
Ammonium Hydroxide	20	NR
Ammonium Hydroxide	28	NR
Ammonium Hydroxide	30	NR
Ammonium Lauryl Sulfate	100	54
Ammonium Phosphate (monobasic)	65	77
Ammonium Sulfate: Diammonium Phosphate	10:10	32
Ammonium Sulfate: Manganese Sulfate: Sulfuric Acid (ph 2, concentration in g/l)	135:13:40	52
Ammonium Sulfate: Manganese Sulfates (ph 5, concentration in g/l)	158:13:00	52

CHEMICAL ENVIRONMENT	CONC. %	TEMP. °C
Ammonium Thiocyanate	20	77
Ammonium Thiosulfate	60	NR
Ammonium Thiosulfate: water (2.3% ammonium sulfate)	05:05.5	54
Amsco Bkoh, Solvent	100	38
Amyl Acetate	100	NR
Amyl Alcohol	100	38
Amyl Chloride	100	NR
Aniline	100	NR
Anionic Polyelectrolytes, blend	100	LS 52
Anthracene Oil	6	32
Anthraquinone Disulfonic Acid	1	66
Antimony Pentachloride	100	32
Aqueous Isopropanol: Dihydrogenated-Tallow Dimethyl Ammonium Chloride	25:75	49
Aqueous Isopropanol: Quaternary Ammonium (dialkyl demethyl type)	25:72	49
Aqueous Isopropanol: Dimethyl Distearyl Ammonium Chloride	25:72	49
Aromatic: Toluene: Aliphatic (3% Xylene)	0.268125	32
Bactericide Phenate Based	100	52
Barium Carbinate	100	LS 82
Barium Chloride	100	82
Barium Hydroxide	10	LS 32

CHEMICAL ENVIRONMENT	CONC. %	TEMP. °C
Barium Sulfate	100	77
Beer	100	32
Benzal Chloride	100	NR
Benzaldehyde	100	NR
Benzene	1	LS 32
Benzene	100	LS 32
Benzene Sulfonic Acid	30	66
Benzene Sulfonic Acid: Sulfuric Acid: Water	88:07:05	60
Benzene: Dimethylformamide: Water (5% Tetrahydrofuran)	40:05:50	NR
Benzoflex 9.88	100	49
Benzotrichloride	100	NR
Benzoyl Chloride	100	NR
Benzyl Alcohol	100	NR
Benzyl Chloride	100	NR
Biocide 207	100	52
Biocide 285	100	52
Biocide; Chlorophenol, Methylene Thiocyanate (blend)	100	52
Biocide; Chlorophenate (organic sulfur type blend)	100	52
Bromine, Dry Gas	100	NR
Bromine, Wet Gas	100	NR
Butyl Acetate	100	LS 32

CHEMICAL ENVIRONMENT	CONC. %	TEMP. °C
Butyl Alcohol (includes normal, secondary, & tertiary)	100	27
Butyl Cellosolve	100	32
Butyl Cellosolve: Monoethanolamine (alkaline film stripper)	57:30:00	NR
Butyl Ether	100	27
Butylene Glycol	100	71
Butyric Acid	1	49
Butyric Acid	25	49
Butyric Acid	50	49
Butyric Acid	70	49
Butyric Acid	100	NR
Calcium Carbinatate, 90% Magnesium Hydroxide, 10% (traces of nickel & iron hydroxides)	25	LS 49
Calcium Hydroxide	25	71
Calcium Hydroxide	1	82
Calcium Hydroxide	15	82
Carbon Dioxide (wet Acidic)	100	93
Carbon Disulfide	100	NR
Carbon Monoxide Gas	100	93
Carbon Tetrachloride	100	LS 32
Carbon Tetrachloride, Vapor	100	32
Chlorine Dioxide, Fumes	5	32
Chloroacetic Acid	1	32

CHEMICAL ENVIRONMENT	CONC. %	TEMP. °C
Chloroacetic Acid	25	32
Chlorobenzene	1	NR
Chlorobenzene	100	NR
Chloroform, Liquid (trichloromethhene)	100	NR
Chloroform, Vapor	100	NR
Chlorophenol, Biocide: Methylene Thiocyanate (blend)	100	52
Chlorosulfonic Acid	100	NR
Chlorphenate, Biocide (organic sulfur type blend)	100	52
Chromate (zinc blend inhibitor, stabilized)	100	52
Chromic Acid	1	49
Chromic Acid	5	49
Chromic Acid	10	49
Chromic Acid	20	49
Chromic Acid	30	NR
Chromic Acid	40	NR
Chromic Acid	50	NR
Chromic Acid, Intermittent	20	NR
Chromic Acid, Vapor	20	49
Chromic Acid: Sulfuric Acid	12.5:16	NR
Chromic Acid: Sulfuric Acid	20:20	NR
Chromic Acid: Sulfuric Acid	20:32	NR

CHEMICAL ENVIRONMENT	CONC. %	TEMP. °C
Chromic Acid: Sulfuric Acid (concentration in oz/gal)	33:00.3	NR
Chromic Acid: Sulfuric Acid (concentration in oz/gal)	40:00.4	NR
Chromic Acid: Sulfuric Acid (concentration in oz/gal)	53:00.5	NR
Cocamidopropyl Betaine	100	49
Cocamidopropyl Dimethylamine	100	49
Cod Liver Oil	100	32
Copper Oxychloride	20	NR
Copper Sulfate: Sulfuric Acid	05:18	49
Corn Oil	100	49
Corn Sugar	100	49
Corn Syrup (crude acidic, decolorizing)	100	49
Cottonseed Oil	100	38
Cresol, Fumes	100	NR
Cresols, Mixture	100	NR
Cresylic Acid, Fumes	100	NR
CWT 102	100	52
Cyclohexanone	100	NR
Cyclohexane	1	49
Cyclohexane	100	49
Decanol	100	71
Diallylphthalate	100	71

CHEMICAL ENVIRONMENT	CONC. %	TEMP. °C
Diammonium Phosphate:		
Ammonium Sulfate	10:10	32
Dibasic Acids	80	NR
Dibutyl Ether	100	27
Dibutyl Phthalate	100	32
Dichloro- (2,6)-Aniline- (4)-Hydrochloride Acid	32	LS 77
Dichlorobenzene	1	NR
Dichlorobenzene	100	NR
Dichlorobenzene (-0- )	100	NR
Dichloroethane (1, 2 -)	100	NR
Dichlorophenol	1	NR
Dichlorophenol	100	NR
Dichloropropane (propylene dichloride)	100	NR
Dichloropropene	100	NR
Dicoco Dimethyl Quaternary	75	49
Diesel Fuel	100	80
Diethanolamine	30	32
Diethyl Benzene	100	NR
Diethyl Ketone	100	NR
Diethylene Glycol	100	82
Diglycolamine	100	NR
Dihydrogenated- Tallow Diemethyl Ammonium Chloride: Aqueous		
Isopropanol	75:25:00	49

CHEMICAL ENVIRONMENT	CONC. %	TEMP. °C
Dimethyl Distearyl Ammonium Chloride: Aqueous Isopropanol	75:25:00	49
Dimethyl Formahide	30	NR
Dimethyl Formahide	100	NR
Dimethyl Morpholine	100	NR
Dimethyl Phthalate	100	NR
Dimethylformahide: Benzene: Water (5% Tetrahydrofuran)	05:40:50	NR
Diocetyl Phthalate	100	NR
Diphenyl Ether	100	NR
Diphenyl Methane Diisocyanate	100	49
Diphenyl Oxide	100	NR
Dipropylene Glycol	100	71
Dipropylene Glycol Dibenzoate	100	49
Dispersant, Anionic (blend)	100	52
Dispersant, Nonionic (blend)	100	LS 52
Dispersing Agents	100	52
Divinyl Benzene	100	NR
Dodecene	100	NR
Dodecene (trace of hydrochloride acid)	100	NR
Drewspers 732 (also 734 & 780)	100	52
Drewspers 738 (also 741 & 735)	100	LS 52
EP 52-A65	100	32
Esters, Fatty Acid	100	82

CHEMICAL ENVIRONMENT	CONC. %	TEMP. °C
Ethanolamine	100	NR
Ethyl Acetate	1	NR
Ethyl Acetate	100	NR
Ethyl Acetate: Methylene Chloride: Caustic 50%	0.72431713	NR
Ethyl Alcohol	100	NR
Ethyl Alcohol	50	32
Ethyl Benzene	1	NR
Ethyl Benzene	100	NR
Ethyl Bromide	100	NR
Ethyl Chloride	100	NR
Ethyl Ether	100	NR
Ethylene Chloride (also called Ethylene Dichloride)	100	NR
Ethylene Chlorohydrin	100	NR
Ethylene Dibromide	100	NR
Ethylene Glycol	100	82
Ethylene Glycol Monobutyl Ether	100	32
Fluorine Gas	100	NR
Fluorolubes (oil & Greases)	100	32
Fluosilicic Acid	25	32
Fluosilicic Acid	1	38
Fluosilicic Acid	10	38
Fluosilicic Acid	35	NR
Formaldehyde	37	32

CHEMICAL ENVIRONMENT	CONC. %	TEMP. °C
Formaldehyde	44	32
Formaldehyde	25	66
Formamide	100	38
Formic Acid	25	49
Formic Acid	1	66
Formic Acid	10	66
Formic Acid	50	NR
Fuel Oil, #1 and#2	100	77
Fungicide, Phenate Based	100	52
Furfural	100	NR
Furnace Oil	100	32
Gluconic Acid	50	52
Glucose	100	82
Glycerine	100	82
Glycolic Acid	70	38
Glycolic Acid	35	60
Glyoxylic Acid	25	NR
Gold Pickling (with sulfuric acid)	25	66
Halso 99	100	NR
Heating Oil	100	32
Heptane, Normal	100	93
Herbicide, Liquid	10	27
Hexachlorocyclopentadiene	100	NR
Hexane	100	71

CHEMICAL ENVIRONMENT	CONC. %	TEMP. °C
Hydraulic Fluid (Skydrol 500)	100	54
Hydrazine	70	NR
Hydriodic Acid	58	NR
Hydrobromic Acid	48	66
Hydrobromic Acid	1	71
Hydrobromic Acid	18	71
Hydrobromic Acid	25	71
Hydrochloric Acid	36	38
Hydrochloric Acid	32	52
Hydrochloric Acid	10	71
Hydrochloric Acid	15	71
Hydrochloric Acid	20	LS 66
Hydrochloric Acid	25	LS 66
Hydrochloric Acid	37	LS 32
Hydrochloric Acid	5	71
Hydrochloric Acid (muriatic acid)	1	71
Hydrochloric Acid (trace of 2,6-Dichloro-4-Aniline)	32	LS 77
Hydrochloric Acid (trace of 2,6-Dichloro-4-Nitroaniline)	32	NR
Hydrochloric Acid (trace of organics)	36	27
Hydrochloric Acid (traces of Cresylic Acid & Phenol)	32	LS 80
Hydrochloric Acid: 2,6-Dichloro-4-Aniline	32	LS 77

CHEMICAL ENVIRONMENT	CONC. %	TEMP. °C
Hydrochloric Acid: Nitric Acid	10:10	NR
Hydrochloric Acid: Phosphorus Acid	0.13	49
Hydrochloric Acid: Phosphorus Acid: Hydrofluoric Acid (concentration in ppm)	1:85:500	NR
Hydrofluoric Acid	1	38
Hydrofluoric Acid	10	LS 27
Hydrofluoric Acid	15	NR
Hydrofluoric Acid (concentration in ppm)	85:1:500	NR
Hydrofluoric Acid: Phosphoric Acid: Hydrochloric Acid (concentration in ppm)	500:85:1	NR
Hydrofluosilicic Acid	10	38
Hydrofluosilicic Acid	35	NR
Hydrogen Bromide, Dry	100	32
Hydrogen Bromide, Wet	100	32
Hydrogen Chloride Gas, Dry Fumes	100	49
Hydrogen Chloride Gas, Wet	100	49
Hydrogen Chloride, Absorber	36	NR
Hydrogen Chloride, Anhydrous	100	32
Hydrogen Fluoride, Wet	100	32
Hydrogen Peroxide	5	66
Hydrogen Peroxide	50	NR
Hydrogen Sulfide	100	60
Hydroxyacetic Acid	70	49

CHEMICAL ENVIRONMENT	CONC. %	TEMP. °C
Hydroxyacetic Acid	35	60
Hypochlorous Acid	20	32
Hypochlorous Acid	10	41
Isocure 306	100	32
Isocure 308	100	32
Iso-Decanol	100	71
Isopropyl Alcohol	100	27
Isopropyl Alcohol	10	54
Isopropyl Palmitate	100	82
Jet Fuel A (recommendations same for Jet Fuel PFB)	100	32
Jet Fuel, JP-4	100	49
Kerosene	100	80
Lactic Acid	100	71
Lauryl Alcohol (n-dodecanol)	100	49
Lead Acetate	100	71
Linoleic Acid	100	71
Linseed Oil	100	71
Liquid Cleaner (all purpose, biodegradable)	100	38
Magnifloc 509-C and 573-C	100	32
Magnifloc E343	100	32
Maleic Anhydride	100	66
Manganese Sulfate: Ammonium Sulfates:Sulfuric Acid (concentration in g/l, ph-5)	0.64	52



CHEMICAL ENVIRONMENT	CONC. %	TEMP. °C
Manganese Sulfates: Ammonium Sulfate (concentration in g/l, ph-5)	0.65	52
Mercaptan, Aromatic	100	NR
Mercaptopropionic, Crude Acid	100	NR
Mercury	100	82
Methanamide	100	38
Methyl Alcohol	100	32
Methyl Alcohol: Water	80:20:00	32
Methyl Ethyl Ketone	100	NR
Methyl Ethyl Ketone: Sulfuric Acid, 50%	0.48	27
Methyl Isobutyl Ketone	100	NR
Methyl Styrene	100	NR
Methyl Tertiary Butyl Ether	100	27
Methylene Chloride	100	NR
Methylene Chloride: Tuolene	50:50:00	NR
Methylene Thiocyanata: Biocide: Chlorophenol (blend)	100	52
Milk & Milk Products	100	82
Mineral Oils	100	82
Mineral Spirits	100	82
Monochlorobenzene	100	NR
Monoethanolamine (also called Ethanolamine)	100	NR
Monoethanolamine (desulfurizing, Sulfur Dioxide & Hydrogen Sulfate	100	NR

CHEMICAL ENVIRONMENT	CONC. %	TEMP. °C
Monoethanolamine, Butyl Cellosolve (alkaline film Stripper)	30:57:00	NR
Naphtha	100	82
Naphthalene	100	66
Nitric Acid	10	32
Nitric Acid	5	71
Nitric Acid	20	NR
Nitric Acid, Vapor	24	NR
Nitric Acid: Hydrochloric Acid	10:10	NR
Nitric Acid: Sulfuric Acid	05:20	NR
Nitrobenzene	100	NR
Nitrogen	100	82
Nitrophenol	100	NR
Nitrous Acid	10	49
Nitrous Acid	100	49
Nonyl Phenol (monoakyl phenol)	100	43
Nut Oil, Ground	100	32
Oil, Crude (sweet & Sour)	100	82
Oil, Crude, B	100	32
Oil, Furnace	100	32
Oil, Heating	100	32
Oil, Low Sulfur Crude	100	49
Oil, Medium Sulfur Crude	100	32
Oil, Mid-Content Sweet	100	32
Oil, Transformer	100	32

CHEMICAL ENVIRONMENT	CONC. %	TEMP. °C
Oils (animal, mineral or vegetable)	100	49
Oleic Acid	100	82
Oligomeric Dispersant	100	54
Olive Oil	100	82
Organic Contaminates: Acid: water	1.5:2:96	66
Organotin: Quaternary Ammonium Salts: Amine Salts (blended)	100	LS 52
Oxalic Acid	100	82
Peanut Oil	100	80
Peel Oil	100	49
Perchloroethylene	100	NR
Perchloric Acid	5	NR
Pet Set 1505 and 2590	100	32
Phenol (carbolic acid)	2	82
Phosphate Salts	25	32
Phosphoric Acid	100	32
Phosphoric Acid	85	71
Phosphoric Acid (super-phosphoric acid)	105	32
Phosphoric Acid, 85%: Sulfuric Acid, 93%	50:50:00	NR
Phosphorus Acid: Hydrochloric Acid	70:02:00	49
Phosphorus Oxychloride	100	27
Phosphorus Trichloride	100	32
Picric Acid (alcoholic)	10	NR

CHEMICAL ENVIRONMENT	CONC. %	TEMP. °C
Polyacrylamide Emulsion	100	32
Polychlorophenate (alcohol & amines blended)	100	52
Polychlorophenate Organosulfur (blend)	100	52
Polyelectrolytes, Anionic	100	54
Polymethylene Polyphenyl Isocyanate	100	49
Polyvinyl Alcohol	100	27
Polyvinyl Alcohol	10	49
Polyvinylidene Chloride Latex	100	27
Polywet ND-2	100	54
Potassium Bicarbonate	10	71
Potassium Carbinatate	10	32
Potassium Carbinatate	25	32
Potassium Chloride	100	82
Potassium Dichromate	100	82
Potassium Hydroxide	10	NR
Potassium Nitrate	100	82
Potassium Permanganate	100	52
Potassium Persulfate	100	32
Potassium Sulfate	100	82
Propionic Acid	1	27
Propylene Glycol	100	77
Quaternary Ammonium Salt: Amine Salts: Organotin (blended)	100	LS 52

CHEMICAL ENVIRONMENT	CONC. %	TEMP. °C
Quaternary Ammonium: Aqueous		
Isopropanol (dialkyl dimethyl type) 75:25:00		49
RJ-4 Fuel	100	27
Sea Water	100	82
Sequestering Agents	100	52
Silver Nitrate	100	82
Slimicide (Polychlorophenate-organosulfur, blend)	100	52
Slimicide (Thiocyanate-poly-chlorophenol, blend)	100	52
Sodium Acetate	100	66
Sodium Bicarbonate	10	82
Sodium Bisulfate	100	82
Sodium Bisulfide: Sodium Hydroxide	15:15	NR
Sodium Bromide	100	82
Sodium Carbonate	25	32
Sodium Carbonate	32	32
Sodium Carbonate	2	66
Sodium Carbonate	10	LS 71
Sodium Chlorate	90	54
Sodium Cyanide	10	49
Sodium Hydrosulfide: Sodium Hydroxide	15:15	NR
Sodium Hydroxide	0.5	38
Sodium Hydroxide	1	LS 32

CHEMICAL ENVIRONMENT	CONC. %	TEMP. °C
Sodium Hydroxide	5	NR
Sodium Hydroxide	02:02:30	NR
Sodium Hydroxide (scrubbing chlorine & chlorine dioxide)	5	NR
Sodium Hydroxide (scrubbing chlorine blow gas)	20	NR
Sodium Hydroxide: Sodium Bisulfate	15:15	NR
Sodium Hydroxide: Sodium Hydrosulfide	15:15	NR
Sodium Hypochlorite (stable)	10	38
Sodium Hypochlorite (stable)	2	49
Sodium Hypochlorite (stable)	05:25	49
Sodium Hypochlorite (stable)	15	NR
Sodium Hypochlorite Bleach Reactor	6	NR
Sodium Sulfate	100	80
Sodium Sulfhydrate	45	NR
Sodium Sulfide	10	27
Sodium Sulfide	30:02:02	NR
Sodium Sulfide	02:30:02	NR
Sodium Sulfite	100	32
Sodium Thiosulfate	100	32
Sodium Xylene Sulfonate	40	32
Soya Oil	100	82
Stannic Chloride	100	82
Stannous Chloride	100	82

CHEMICAL ENVIRONMENT	CONC. %	TEMP. °C
Steam: Sulfuric Acid (cyanuric acid tank, calcined urea)	16	99
Stearic Acid	100	82
Styrene	100	NR
Sugar Solution	60	32
Sulfonyl Chloride, Aromatic	100	NR
Sulfophthalic Acid	50:01:06	LS 32
Sulfur Chloride	100	NR
Sulfur Dichloride	100	NR
Sulfur Dioxide (desulfurizing, hydrogen sulfide with monoethanolamine)	100	NR
Sulfur Dioxide (wet or dry)	100	82
Sulfur Trioxide, Dry	100	NR
Sulfur Trioxide, Wet	100	NR
Sulfur, Molten	100	NR
Sulfur, Molten (trace hydrogen sulfide, sulfur dioxide & Water)	100	NR
Sulfuric Acid	50	49
Sulfuric Acid	25	66
Sulfuric Acid	1	82
Sulfuric Acid	5	82
Sulfuric Acid	70	NR
Sulfuric Acid (gold pickling)	25	66
Sulfuric Acid (trace dichlorides)	76	NR

CHEMICAL ENVIRONMENT	CONC. %	TEMP. °C
Sulfuric Acid (with lime, used for treating waste oil, gear, cutting, etc)	93	NR
Sulfuric Acid (Xylene derivative, t-amine metal salt)	20	38
Sulfuric Acid, 50%: Methyl Ethyl Ketone	90:10:00	27
Sulfuric Acid, 93%: Phosphoric Acid, 85%	50:50:00	NR
Sulfuric Acid, Vapor	50	49
Sulfuric Acid, Vapor	10	82
Sulfuric Acid, Vapor	20	82
Sulfuric Acid: 4-Sulphthalic Acid	1.6:50	LS 32
Sulfuric Acid: Benzene Sulfonic Acid: Water	0.35	60
Sulfuric Acid: Chromic Acid	16:12.5	NR
Sulfuric Acid: Copper Sulfate	18:05	49
Sulfuric Acid: Manganese Sulfate: Ammonium Sulfate (concentration in g/l, ph 5)	40:13:13	52
Sulfuric Acid: Nitric Acid	20:05	NR
Sulfuric Acid: Steam (cyanuric acid tank, calcined urea)	16	99
Sulfuric Evaporation (concentration up to 70%)	70	NR
Sulfurous Acid	10	NR
Tetrapotassium Pyrophosphate	60	32

CHEMICAL ENVIRONMENT	CONC. %	TEMP. °C
Tetrasodium Pyrophosphate	5	52
Thiocyanate, water (2.3% ammonium sulfate)	5.5:4:88	54
Thionyl Chloride, Vapor	100	NR
Tinofix QF	50	32
Toluene	100	NR
Toluene, Aromatic, Aliphatic (3% Xylene)	86:05:06	32
Transmission Fluid, Automatic	100	32
Tributyl Phosphate	100	66
Trichloroacetic Acid	50	32
Trichlorobenzene	100	NR
Trichloroethane	100	NR
Triethanol Ammonium Lauryl Sulfate	100	NR
Trimethylamine Hydrochloride (ph 3-4)	100	54
Triphenyl phosphate	100	32
Tuna Oil	100	71
Turpentine, Pure Gum	100	32
Vanasol	1	27
Varsol	100	93
Vinegar	100	82
Vinyl Toluene	100	NR
Water, City (10-60 psi)	100	71

CHEMICAL ENVIRONMENT	CONC. %	TEMP. °C
Water, Deionized	100	66
Water, Deionized (high purity, 1.5 umho/cm)	100	32
Water, Demineralized	100	82
Water, Distilled	100	71
Water, Light (FC203, trademark)	100	49
Water, Light (FC206A, trademark)	100	49
Water, Methyl Alcohol	0.89	32
Water, Organic:Acid Contaminated	96.5:1.5	66
Water, Steam Condensate	100	71
Water: Acetic Acid (trace sulfuric acid, Methylene chloride, octyl alcohol, sodium chloride, Chlorobenzene)	48:01.3	66
Water: Ammonium Thiosulfate: Ammonium Thiocyanate (2.3% ammonium sulfate)	05:05.5	54
Water: Benzene Sulfonic Acid: Sulfuric Acid	0.27	60
Water: Benzene: Dimethylformamide (5% Tetrahydrofuran)	50:40:05	NR
Xylene	100	32
Zinc Sulfate	100	82