Chemical	Conc.(%)	Maximum Recommended Temperature for **SWANCOR** or **SWANCOR CHEMPULSE** Resins(°F/°C) 901	905	907	980
A					
Acetaldehyde[6]	100	NR	NR		NR
Acetic Acid	1-25	210/99	210/99	210/99	150/65
	26-50	180/82	180/82	180/82	
	51-75	150/65	150/65	150/65	
Acetic Anhydride	100	NR	NR	100/38	NR
Acetone	100	NR	NR	NR	NR
Acrylic Acid	25	100/38	100/38	100/38	100/38
Acrylic Latex	All	120/49	120/49	120/49	120/49
Acrylonitrile	All	NR	NR	NR	NR
Adipic Acid	23	180/82	180/82	180/82	
Alcohol, Butyl	100	120/49	120/49	120/49	NR
Alcohol, Ethyl	10	150/65	150/65	150/65	150/65
	95	80/27	80/27	100/38	NR
Alcohol,Isopropyl[5]	10	150/65	150/65	150/65	150/65
	100	120/49	120/49	120/49	NR
Alcohol, Methyl (Methanol)[5,6]	5	120/49	120/49	120/49	
	100	NR	NR	100/38	NR
Alcohol, Methyl Isobutyl[5]	10	120/49	120/49	150/65	150/65
Alcohol, Secondary Butyl[5]	10	150/65	150/65	150/65	150/65
Allyl Chloride	All	80/27	80/27	80/27	NR
Alum	Sat'd	210/99	210/99	250/121	180/82
Aluminum Chloride	Sat'd	210/99	210/99	250/121	180/82
Aluminum Fluoride	All	80/27	80/27	80/27	80/27
Aluminum Hydroxide	100	180/82	180/82	200/93	180/82
Aluminum Nitrate	All	210/99	210/99	210/99	180/82
Aluminum Potassium Sulfate	Sat'd	210/99	210/99	250/121	180/82
Ammonia Aqueous[1]	100	180/82	180/82	200/93	180/82
Ammonia Gas	100	100/38	100/38	100/38	100/38
Ammonia	Liquified Gas	NR	NR	NR	NR
Ammonium Acetate	>0.5	80/27	80/27	100/38	NR
Ammonium Bicarbonate	1-50	160/71	160/71	160/71	160/71
Ammonium Bisulfite	All	150/65	150/65	150/65	
Ammonium Carbonate	All	150/65	150/65	150/65	150/65
Ammonium Chloride	All	210/99	210/99	210/99	180/82

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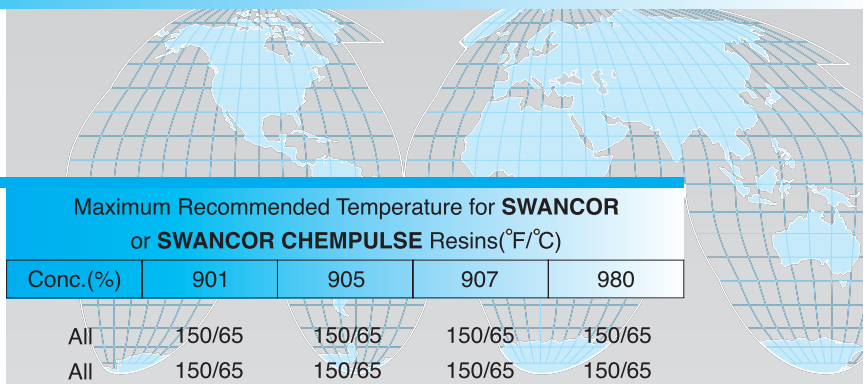
For notes, please see page 7.



Chemical

	Conc.(%)	Maximum Recommended Temperature for **SWANCOR** or **SWANCOR CHEMPULSE** Resins(°F/°C) 901	905	907	980
Ammonium Citrate	All	150/65	150/65	150/65	150/65
Ammonium Fluoride[1]	All	150/65	150/65	150/65	150/65
Ammonium Hydroxide[1]	5	180/82	180/82	150/65	180/82
	10	150/65	150/65	100/38	150/65
	20	150/65	150/65	100/38	150/65
	29	100/38	100/38	100/38	100/38
Ammonium Nitrate	Sat'd	210/99	220/104	150/65	180/82
Ammonium Persulfate	All	210/99	210/99	210/99	180/82
Ammonium Phosphate	All	210/99	210/99	210/99	180/82
Ammonium Sulfate	Sat'd	210/99	220/104	250/121	180/82
Amyl Acetate[6]	100	70/21	NR	120/49	NR
Aniline[6]	All	NR	NR	70/21	NR
Aniline Hydrochloride	All	180/82	180/82	180/82	
Aniline Sulfate	All	210/99	210/99	210/99	
Arsenious Acid	19°Be	180/82	180/82	180/82	150/65
B					
Barium Acetate	All	180/82		180/82	
Barium Carbonate	All	180/82	180/82	180/82	180/82
Barium Chloride	All	210/99	210/99	210/99	180/82
Barium Hydroxide	All	150/65	150/65	150/65	150/65
Barium Sulfate	Sat'd	210/99	210/99	250/121	180/82
Barium Sulfide	All	180/82	180/82	180/82	
Beer	All	120/49	NR	NR	NR
Benzene[5]	100	NR	NR	100/38	NR
Benzene Sulfonic Acid	All	150/65	150/65	150/65	150/65
Benzoic Acid	Sat'd	210/99	210/99	210/99	180/82
o-Benzoyl Benzoic Acid	All	210/99	210/99	210/99	150/65
Benzyl Alcohol	All	NR	NR	100/38	NR
Benzyl Chioride	100	NR	NR	80/27	NR
Black Liquor Recovery Furnace gasses		325/163	325/163	400/204	
Bleaches					
Calcium Hypochlorite[7]	All	180/82	180/82	100/38	180/82
Chlorine Dioxide[1,2,4]	All	180/82	200/93	200/93	

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For notes, please see page 7.

Chemical	Conc.(%)	Maximum Recommended Temperature for **SWANCOR** or **SWANCOR CHEMPULSE** Resins(°F/°C) 901	905	907	980
Sodium Hypochlorite[1,2,4]	1-5	150/65	150/65	120/49	120/49
	5-15	180/82	180/82	120/49	150/65
Boric Acid	>0.5	210/99	210/99	210/99	180/82
Brass Plating Solution		180/82	180/82	180/82	180/82
3% Copper Cyanide					
6% Sodium Cyanide					
1% Zinc Cyanide					
3% Sodium Carbonate					
Bromine, Liquid	100	NR	NR	NR	NR
Bromine, Water	5	180/82	180/82	200/93	
Bronze Plating Solution[1]		180/82	180/82	190/88	
4% Copper Cyanide					
5% Sodium Cyanide					
3% Sodium Carbonate					
4.5% Rochelle Salts					
Butyl Acetate[5,6]	100	NR	NR	80/27	NR
Butyl Benzyl Phthalate, BBP	100	180/82	180/82	210/99	
Butyl Carbitol, BC	100	100/38	100/38	100/38	
Butyl Cellosolve, BCS	100	100/38	100/38	100/38	
Butylene Glycol, BG	100	160/71	160/71	180/82	
Butyric Acid	1-50	210/99	210/99	210/99	
	100	80/27	80/27	120/49	
C					
Cadmium Chloride	All	210/99	210/99	210/99	180/82
Cadmium Cyanide Plating Solution[1]		180/82	180/82	180/82	150/65
3% Cadmium Oxide					
10% Sodium Cyanide					
1% Caustic Soda					
Calcium Bisulfite	All	210/99	210/99	210/99	180/82
Calcium Carbonate	All	180/82	180/82	180/82	180/82
Calcium Chlorate	All	210/99	210/99	210/99	180/82
Calcium Chloride	Sat'd	210/99	210/99	250/121	180/82
Calcium Hydroxide[1]	100	210/99	210/99	210/99	180/82
Calcium Hypochlorite[7]	All	180/82	180/82	100/38	180/82
Calcium Nitrate	All	210/99	210/99	210/99	180/82
Calcium Sulfate	All	210/99	210/99	210/99	180/82

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Chemical

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Calcium Sulfite	All	210/99	210/99	210/99	180/82
Cane Sugar Liquor	All	180/82			
Caprylic Acid	100	180/82	180/82	210/99	180/82
Carbon Acid		150/65	150/65	150/65	
Carbon Dioxide, Gas		325/165	325/165	400/205	180/82
Carbon Disulfide[6]	100	NR	NR	NR	NR
Carbon Monoxide, Gas		325/165	325/165	400/205	180/82
Carbon Tetrachloride	100	150/65	150/65	180/82	
Carbowax (PEG)	100	150/65	150/65	180/82	150/65
Castor Oil	100	160/71	160/71	160/71	160/71
Carboxy Methyl Cellulose	10	150/65	150/65	150/65	150/65
Chlorinated Brine Liquors (caustic chlorine cell)				190/88	
Chlorinated Wax	All	180/82	180/82	180/82	
Chlorine Dioxide, Air[1,2,4]	15	200/93	200/93	200/93	
Chlorine Dioxide, Wet Gas[1,2,4]	Sat'd	180/82	180/82	180/82	180/82
Chlorine, Dry Gas[3,4,8]	100	210/99	220/104	250/121	180/82
Chlorine, Wet Gas[3,4,8]	100	210/99	220/104	250/121	180/82
Chlorine, Liquid	Sat'd Cl_2	NR	NR	NR	NR
Chlorine, Water	All	180/82	180/82	150/65	
Chloroacetic Acid	25	120/49	120/49	150/65	
	50	100/38	100/38	100/38	
	Conc.	NR	NR	NR	NR
Chlorobenzene[6]	100	NR	NR	100/38	NR
Chloroform[5,6]	100	NR	NR	NR	NR
Chlorosulfonic Acid	100	NR	NR	NR	NR
Chrome Plating Bath[1] 19% Chromic Acid with Sodium Fluorosillicate and Sulfate		120/49	120/49	150/65	120/49
Chromic Acid[6]	10	150/65	150/65	150/65	150/65
	20	120/49	150/65	150/65	120/49
	30	NR	NR	NR	NR
Chromium Sulfate	All	210/99	210/99	210/99	180/82
Citric Acid	All	210/99	210/99	210/99	150/65
Coconut Oil	100	180/82	180/82	200/93	180/82
Copper Chloride	Sat'd	210/99	220/104	250/121	180/82
Copper Cyanide	All	210/99	210/99	210/99	180/82

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Copper Fluoride	All	210/99	210/99	210/99	210/99
Copper Nitrate	All	210/99	210/99	210/99	180/82
Copper Cyanide Plating Solutions: 10.5% Copper and 14% Sodium Cyanide 6% Rochelle Salts		160/71	160/71	160/71	160/71
Copper Brite Plating Caustic - Cyanide		160/71	160/71	190/88	
Copper Plating Solution[1] 45% Copper Fluoborate 19% Copper Sulfate 8% Sulfonic		180/82	180/82	180/82	180/82
Copper Matte Dipping Bath[3,8] 30% Ferric Chloride 19% Hydrochloric		180/82	200/93	200/93	180/82
Copper Pickling Bath 10% Ferric Sulfate		200/93	200/93	200/93	
Copper Sulfate	Sat'd	210/99	210/99	250/121	180/82
Corn Oil	100	180/82	180/82	210/99	150/65
Corn Starch	Slurry	210/99			
Corn Sugar	All	180/82			
Cottonseed Oil	100	210/99	210/99	210/99	150/65
Cresylic Acid[6]	100	NR	NR	NR	NR
Crude Oil, Sour	100	210/99	210/99	250/121	150/65
Crude Oil,Sweet	100	210/99	210/99	250/121	150/65
Cyclohexane	100	120/49	120/49	150/65	
Cyclohexanone		120/49	120/49	150/65	120/49
D					
Detergents, Organic	100	160/71	160/71	200/93	160/71
Diallyl Phthalate (DAP)	All	180/82		210/99	150/65
Di-Ammonium Phosphate	>0.5	210/99	210/99	210/99	180/82
Dibromophenol[5,6]	100	NR	NR	100/38	NR
Dibutyl Ether[5,6]	100	80/27		180/82	
Dichlorobenzene[6]	100	NR	NR	120/49	NR
Dichloroethane[1,2]	100	NR	NR	80/27	NR
Dichloroethylene[6]	100	NR	NR	NR	NR

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Dichloromethane[6]	100	NR	NR	NR	NR
Dichloropropane[6]	100	NR	NR	100/38	NR
Dichloropropene[5,6]	100	NR	NR	80/27	NR
Diesel Fuel[5]	100	180/82	180/82	210/99	150/65
Diethanol Amine[5]	100	120/49	120/49	150/65	
Diethyl Amine[6]	100	NR	NR	NR	NR
Diethyl Benzene[6]	100	100/38	100/38	150/65	NR
Diethyl Carbonate[6]	100	NR	NR	100/38	NR
Diethylene Glycol	100	180/82	180/82	210/99	180/82
Diethylhexyl Phosphoric Acid (in Kerosene)	20	180/82	180/82	180/82	
Diethyl Sulfate	100	100/38	100/38	120/49	NR
Diisobutylene	100	100/38	100/38	100/38	80/27
Diisobutyl Phthalate	100	150/65	150/65	150/65	
Diisopropanol Amine	100	120/49	120/49	150/65	100/38
Dimethyl Formamide[6]	100	NR	NR	NR	NR
Dimethyl Morpholine[5,6]	100	NR	NR	120/49	NR
Dimethyl Phthalate (DMP)	100	150/65	150/65	180/82	
Dioctyl Phthalate (DOP)	100	150/65	150/65	210/99	150/65
Dipropylene Glycol	100	180/82	180/82	210/99	150/65
DMA 4 Weed Killer	100	120/49	120/49	120/49	
DMA 6 Weed Killer	100	120/49	120/49	120/49	
Dodecyl Alcohol	100	150/65	150/65	180/82	120/49
E					
ELECTROSOL (Antistatic Agent)	All	150/65	150/65	150/65	
Epichlorohydrin[5,6]	100	NR	NR	80/27	NR
Epoxidized Soybean Oil	100	150/65	150/65	150/65	150/65
Esters, Fatty Acids	100	180/82	180/82	180/82	150/65
Ethyl Acetate, EAC[6]	100	NR	NR	70/21	NR
Ethyl Acrylate, EA[6]	100	NR	NR	80/27	NR
Ethyl Benzene[6]	100	80/27	80/27	120/49	
Ethyl Bromide[6]	100	NR	NR	NR	NR
Ethyl Chloride[6]	100	NR	NR	80/27	NR
Ethyl Ether[6]	100	NR	NR	NR	NR
Ethylene Chlorohydrin	100	100/38	100/38	100/38	NR
Ethylene Glycol (EG)	All	210/99	210/99	210/99	150/65

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Ethylene Glycol Monobutyl Ether[5,6]	100	100/38	100/38	100/38	NR
Ethyl Sulfate	100	80/27	80/27	100/38	100/38
F					
Fatty Acids	All	210/99	210/99	250/121	160/65
Ferric Chloride	All	210/99	210/99	210/99	180/82
Ferric Nitrate	All	210/99	210/99	210/99	180/82
Ferric Sulfate	All	210/99	210/99	210/99	180/82
Ferrous Chloride	All	210/99	210/99	210/99	180/82
Ferrous Nitrate	All	210/99	210/99	210/99	180/82
Ferrous Sulfate	All	210/99	210/99	210/99	180/82
8-8-8 Fertilizer		150/65	150/65	150/65	150/65
Fertilizer- Urea Ammonium Nitrate		150/65	150/65	150/65	150/65
Flue Gas, Dry		325/163	325/163	400/204	
Fluoboric Acid[1,4]	All	210/99	210/99	210/99	150/65
Fluosilicic Acid[1,4]	10	180/82	180/82	180/82	150/65
	11-35	100/38	100/38	100/38	100/38
Formaldehyde	All	120/49	120/49	150/65	
Formic Acid	10	180/82	180/82	180/82	150/65
	50	120/49	120/49	120/49	NR
Freon 11		80/27	80/27	100/38	NR
Fuel Oil	100	180/82	180/82	210/99	150/65
Furfural[5,6]	10	100/38	100/38	120/49	
	100	NR	NR	NR	NR
G					
Gas, Natural		210/99	210/99	210/99	210/99
Gasoline, Auto		180/82	180/82	180/82	150/65
Gasoline, Aviation		180/82	180/82	180/82	150/65
Gasoline, Ethyl	100	180/82	180/82	180/82	
Gasoline, Sour		180/82	180/82	180/82	
Gluconic Acid	50	180/82	180/82	180/82	150/65
Glucose	100	180/82			
Glutaric Acid	50	120/49	120/49	120/49	
Glycerine	100	210/99	210/99	210/99	150/65

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Chemical

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Glycolic Acid	70	100/38	100/38	100/38	
Glyoxal	40	100/38	100/38	100/38	
Gold Plating Solution		210/99	210/99	210/99	180/82
23% Potassium Ferrocyanide					
0.2% Potassium Gold Cyanide					
0.8% Sodium Cyanide					
H					
N-Heptane	100	210/99	210/99	210/99	180/82
Hexane	100	160/71	160/71	160/71	
Hexylene Glycol		150/65	150/65	150/65	150/65
Hot Stack Gas		325/163	325/163	400/204	
Hydraulic Fluid	100	180/82	180/82	180/82	180/82
Hydrazine[6]	100	NR	NR	NR	NR
Hydrobromic Acid	0-25	180/82	180/82	180/82	180/82
	25-50	150/65	150/65	150/65	150/65
	50-60	100/38	100/38	100/38	100/38
Hydrochloric Acid[9]	0-20	180/82	210/99	230/110	180/82
	20-32	150/65	150/65	180/82	150/65
	37	100/38	100/38	120/49	
Hydrocyanic Acid	All	210/99	210/99	210/99	180/82
Hydrofluoric Acid[1,4]	10	150/65	150/65	150/65	150/65
	20	100/38	100/38	100/38	100/38
Hydrofluosilicic Acid[1]	10	180/82	180/82	180/82	150/65
Hydrogen Bromide, Wet Gas	100	180/82	180/82	180/82	180/82
Hydrogen Chloride, Dry Gas	100	210/99	210/99	350/177	180/82
Hydrogen Fluoride, Dry Vapor (if wet max 100°F/40°C)[1,4]		180/82	180/82	180/82	180/82
Hydrogen Peroxide[2,4]	0-30	150/65	150/65	150/65	150/65
Hydrogen Sulfide, Dry Gas	All	210/99	210/99	230/110	180/82
Hydrogen Sulfide, Aqueous	All	210/99	210/99	210/99	180/82
Hydrosulfite Bleach		180/82	180/82	180/82	180/82
Hypochlorous Acid[7]	10	100/38	100/38	100/38	100/38
I					

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Iron Plating Solution 45% $FeCl_2$; 15% $CaCl_2$; 20% $FeSO_4$; 11% $(NH_4)_2SO_4$		180/82	180/82	250/121	180/82
Iron and Steel Cleaning Bath 9% Hydrochloric 23% Sulfuric	9	180/82	180/82	210/99	180/82
Isopropyl Amine	0.5-50	100/38	100/38	100/38	NR
Isopropyl Palmitate	100	210/99	210/99	230/110	150/65
Itaconic Acid	40	140/60	140/60	140/60	140/60
J					
Jet Fuel	100	140/60	140/60	140/60	140/60
K					
Kerosene	100	180/82	180/82	180/82	150/65
L					
Lactic Acid	All	210/99	210/99	210/99	150/65
LASSO Herbicide[5,6]		NR	NR	120/49	NR
Latex	All	120/49	120/49	120/49	120/49
Lauric Acid	All	210/99	210/99	210/99	150/65
Lauroyl Chloride	100	100/38		120/49	
Lead Acetate	Sat'd	210/99	210/99	230/110	
Lead Nitrate	All	210/99	210/99	210/99	210/99
Lead Plating Solution[1,4] 8% Lead 0.8% Fluoboric Acid 0.4% Boric Acid		180/82	180/82	180/82	
Levulinic Acid	Sat'd	210/99	210/99	230/110	
Linseed Oil	100	210/99	210/99	230/110	150/65
Lithium Bromide	Sat'd	210/99	210/99	250/121	180/82
Lithium Sulfate	All	210/99	210/99	210/99	180/82
M					
Magnesium Bisulfite	All	210/99	210/99	210/99	180/82
Magnesium Carbonate	All	180/82	180/82	180/82	180/82

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Chemical

Chemical	Conc.(%)	Maximum Recommended Temperature for **SWANCOR** or **SWANCOR CHEMPULSE** Resins(°F/°C) 901	905	907	980
Magnesium Chloride	All	210/99	210/99	250/121	180/82
Magnesium Hydroxide	All	210/99	210/99	210/99	180/82
Magnesium Sulfate	Sat'd	210/99	210/99	250/121	180/82
Maleic Acid	All	180/82	180/82	210/99	180/82
Mercuric Chloride	All	210/99	210/99	210/99	180/82
Mercurous Chloride	All	210/99	210/99	210/99	180/82
Methacrylic Acid	25	100/38	100/38	120/49	100/38
Methylene Chloride [6]	100	NR	NR	NR	NR
Methyl Ethyl Ketone[6] (MEK)	100	NR	NR	70/21	NR
Methyl Isobutyl Carbitol[6]	100	NR	NR	NR	NR
Methyl Isobutyl Ketone[6] (MIBK)	100	80/27	80/27	120/49	NR
Methyl Methacrylate (MMA)		NR	NR	80/27	NR
Methyl Styrene	100	80/27	80/27	120/49	NR
Mineral Oils, Aliphatic	100	210/99	210/99	250/121	150/65
Molybdenum Disulfide	100	200/93	200/93	200/93	150/65
Monochloroacetic Acid[6]	100	NR	NR	NR	NR
Monoethanolamine[6]	100	80/27	80/27	100/38	NR
Motor Oil		210/99	210/99	250/121	150/65
Myristic Acid	100	210/99	210/99	250/121	150/65
N					
Naphtha	100	180/82	180/82	210/99	180/82
Naphthalene	100	210/99	210/99	210/99	180/82
Nickel Chloride	All	210/99	210/99	210/99	180/82
Nickel Nitrate	All	210/99	210/99	210/99	180/82
Nickel Plating[1,4] 8% Lead 0.8% Fluoboric Acid 0.4% Boric Acid		180/82	180/82	180/82	180/82
Nickel Plating 11% Nickel Sulfate 2% Nickel Chloride 1% Boric Acid		180/82	180/82	180/82	180/82
Nickel Plating 44% Nickel Sulfate 4% Ammonium Chloride		180/82	180/82	180/82	180/82

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4% Boric Acid					
Nickel Sulfate	All	210/99	210/99	210/99	180/82
Nitric Acid[4]	5	150/65	150/65	180/82	150/65
	20	120/49	120/49	150/65	120/49
	40	NR	NR	100/38	NR
Nitric Acid Fumes[4]		180/82	180/82	180/82	180/82
Nitrobenzene[5,6]	100	NR	NR	100/38	NR
O					
OAKITE Rust Stripper		180/82	180/82	180/82	150/65
Octanoic Acid	100	180/82	180/82	210/99	
Oil, Sour Crude	100	210/99	210/99	250/120	150/65
Oil, Sweet Crude	100	210/99	210/99	250/120	150/65
Oleic Acid	All	210/99			
Oleum (Fuming Sulfuric)		NR	NR	NR	NR
Olive Oil	100	210/99			
Oxalic Acid	Sat'd	120/49	120/49	120/49	
P					
Palmitic Acid	100	210/99			
Peanut Oil	100	180/82			
Perchloroethylene[5,6]	100	80/27	80/27	120/49	NR
Perchloric Acid	10	150/65	150/65	150/65	150/65
	30	100/38	100/38	100/38	100/38
Peroxide Bleach 2% Sodium Peroxide 96% 0.025% Epsom Salts 5% Sodium Silicate 42°Be 1.4% Sulfuric Acid 66°Be		210/99	210/99	210/99	180/82
Phenol	100	NR	NR	NR	NR
Phenol Sulfonic Acid	100	NR	NR	NR	NR
Phosphoric Acid	All	210/99	210/99	220/104	180/82
Phosphoric Acid Fumes		210/99	210/99	250/121	180/82
Phosphorous Pentoxide	0-54	210/99	210/99	210/99	180/82
Phosphorous Trichloride	100	NR	NR	NR	NR
Phthalic Acid	All	210/99	210/99	210/99	

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■ For notes, please see page 7.

Chemical

	Conc.(%)	Maximum Recommended Temperature for **SWANCOR** or **SWANCOR CHEMPULSE** Resins(°F/°C) 901	905	907	980
Pickling Acids, Sulfuric and Hydrochloric		210/99	210/99	210/99	180/82
Picric Acid, Alcoholic[5,6]	10	NR	NR	100/38	NR
Polyvinyl Acetate Latex (PVAC)	All	210/99	210/99	210/99	180/82
Polyvinyl Alcohol (PVA)	100	180/82	180/82	180/82	
Polyvinyl Chloride Latex with 35 parts DOP		120/49	120/49	120/49	NR
Potassium Aluminum Sulfate	Sat'd	210/99	210/99	250/121	180/82
Potassium Bicarbonate[1]	All	180/82	180/82	180/82	180/82
Potassium Bromide	All	210/99	210/99	210/99	180/82
Potassium Carbonate[1]	50	180/82	180/82	150/65	180/82
Potassium Chloride	All	210/99	210/99	210/99	180/82
Potassium Dichromate	All	210/99	210/99	210/99	180/82
Potassium Ferricyanide	All	210/99	210/99	210/99	180/82
Potassium Ferrocyanide	All	210/99	210/99	210/99	180/82
Potassium Hydroxide[1,4]	45	150/65	150/65	80/27	
Potassium Nitrate	All	210/99	210/99	210/99	180/82
Potassium Permanganate	All	210/99	210/99	210/99	180/82
Potassium Persulfate	All	210/99	210/99	210/99	180/82
Potassium Sulfate	All	210/99	210/99	210/99	180/82
Propionic Acid	50	180/82	180/82	180/82	180/82
	100	NR	NR	100/38	NR
Propylene Glycol	100	210/99	210/99	210/99	
Pulp Paper Mill Effluent		180/82	180/82	180/82	
Pyridine	100	NR	NR	NR	NR
R					
Rayon Spin Bath				140/60	
S					
Salicylic Acid	All	160/70			
Sebacic Acid	All	210/99	210/99	210/99	180/82
Selenius Acid	All	210/99	210/99	210/99	180/82
Silver Nitrate	All	210/99	210/99	210/99	180/82
Silver Plating Solution[1]		180/82	180/82	150/65	
4% Silver Cyanide					
7% Potassium Cyanide					

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For notes, please see page 7.

Chemical	Conc.(%)	Maximum Recommended Temperature for **SWANCOR** or **SWANCOR CHEMPULSE** Resins(°F/°C) 901	905	907	980
5% Sodium Cyanide 2% Potassium Carbonate					
Soaps	All	210/99	210/99	210/99	
Sodium Acetate	All	210/99	210/99	210/99	
Sodium Alkyl Aryl Sulfonates	All	180/82	180/82	180/82	150/65
Sodium Aluminate[1]	All	160/70	160/70	120/49	120/49
Sodium Benzoate	100	180/82	180/82	180/82	180/82
Sodium Bicarbonate[1]	100	180/82	180/82	180/82	180/82
Sodium Bifluoride[1]	All	120/49	120/49	120/49	120/49
Sodium Bisulfate	All	210/99	210/99	210/99	180/82
Sodium Bisulfite	Sat'd	210/99	210/99	210/99	180/82
Sodium Bromate	All	210/99	210/99	210/99	180/82
Sodium Bromide	All	210/99	210/99	210/99	180/82
Sodium Carbonate[1]	All	180/82	180/82	150/65	180/82
Sodium Chlorate	All	210/99	210/99	210/99	180/82
Sodium Chloride	All	210/99	210/99	210/99	180/82
Sodium Chlorite, pH<6, Scrubber		170/77	170/77		
Sodium Chlorite, pH<6,Bleaching		180/82	196/91	199/93	
Sodium Chlorite, pH>6	All	180/82	180/82	180/82	180/82
Sodium Chromate	All	210/99	210/99	210/99	180/82
Sodium Cyanide	All	210/99	210/99	210/99	
Sodium Dichromate	All	210/99	210/99	210/99	180/82
Sodium Diphosphate	All	210/99	210/99	210/99	180/82
Sodium Ferricyanide	All	210/99	210/99	210/99	
Sodium Ferrocyanide	All	210/99	210/99	210/99	180/82
Sodium Fluoride[1]	All	180/82	180/82	180/82	180/82
Sodium Fluorosilicate[1,2]	All	120/49	120/49	120/49	120/49
Sodium Hexametaphosphates	All	180/82	180/82	180/82	180/82
Sodium Hydroxide[1,4]	5	180/82	180/82	100/38	150/65
	10	180/82	180/82	100/38	150/65
	25	180/82	180/82	100/38	150/65
	50	210/99	180/82	100/38	150/65
Sodium Hydrosulfide	All	180/82	180/82	180/82	180/82
Sodium Hypochlorite[7]	0-5	150/65	150/65	120/49	120/49
	5-15	180/82	180/82	120/49	150/65
Sodium Lauryl Sulfate (SLS)	All	160/71	160/71	160/71	

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For notes, please see page 7.

Chemical

	Maximum Recommended Temperature for **SWANCOR** or **SWANCOR CHEMPULSE** Resins(°F/°C)				
	Conc.(%)	901	905	907	980
Sodium Mono-Phosphate	All	210/99	210/99	210/99	180/82
Sodium Nitrate	All	210/99	210/99	210/99	180/82
Sodium Nitrite	All	210/99	210/99	210/99	180/82
Sodium Persulfate	All	210/99	210/99	210/99	180/82
Sodium Silicate	All	210/99	210/99	210/99	180/82
Sodium Sulfate	All	210/99	210/99	210/99	180/82
Sodium Sulfide	All	210/99	210/99	210/99	180/82
Sodium Sulfite	All	210/99	210/99	210/99	180/82
Sodium Tetraborate	All	180/82	180/82	180/82	180/82
Sodium Thiocyanate	All	180/82	180/82	180/82	180/82
Sodium Thiosulfate	All	180/82	180/82	180/82	180/82
Sodium Tripolyphosphate	All	210/99	210/99	210/99	180/82
Sodium Xylene Sulfonate	All	160/71	160/71	160/71	
Sorbitol Solutions	All	160/71	160/71	180/82	
Sour Crude Oil	100	210/99	210/99	250/121	150/65
Soya Oil	All	210/99	210/99	210/99	150/65
Stannic Chloride	All	210/99	210/99	210/99	180/82
Stannous Chloride	All	210/99	210/99	210/99	180/82
Stearic Acid	All	210/99	210/99	210/99	150/65
Styrene[5]	100	NR	NR	120/49	NR
Succinonitrile	All	80/27	80/27	100/38	NR
Sugar, Beet and Cane Liquor	All	180/82			
Sugar, Sucrose	All	210/99			
Sulfamic Acid	25	150/65	150/65	150/65	150/65
Sulfanilic Acid	All	210/99	210/99	210/99	180/82
Sulfated Detergents	All	160/70	160/70	180/82	160/70
Sulfur Dioxide, Wet SO_2		180/82	180/82	210/99	180/82
Sulfur Trioxide/Dry	Fumes	210/99	210/99	300/149	180/82
Sulfuric Acid	0-50	210/99	210/99	210/99	180/82
Sulfuric Acid	51-70	180/82	180/82	180/82	180/82
Sulfuric Acid[2]	71-75	100/38	100/38	180/82	100/38
Sulfuric Acid	Over 75	NR	NR	NR	NR
Sulfurous Acid	10	120/49	120/49	120/49	120/49
Superphosphoric Acid 76% P_2O_5	105%	210/99	210/99	210/99	180/82

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Chemical	Conc.(%)	Maximum Recommended Temperature for **SWANCOR** or **SWANCOR CHEMPULSE** Resins(°F/°C) 901	905	907	980
T					
Tall Oil		210/99	210/99	220/104	
Tannic Acid	All	210/99	210/99	210/99	150/65
Tartaric Acid	All	210/99	210/99	210/99	150/65
Tetrachloroethylene[5,6]	100	80/27	80/27	120/49	NR
Tetrasodium Ethylenediaminetetraacetic Acid[1]	All	180/82	180/82	150/65	180/82
Thioglycolic Acid [5,6]	All	NR	NR	100/38	NR
Thionyl Chloride	100	NR	NR	NR	NR
Tin Fluoborate Plating Bath[1]		210/99	210/99	210/99	180/82
18% Stannous Fluoborate					
7% Tin					
9% Fluoboric Acid					
2% Boric Acid					
Toluene[5,6]	100	80/27	80/27	120/49	NR
Toluene Sulfonic Acid (PTSA)	All	180/82	200/93	210/99	
Transformer Oils					
Mineral Oil Types		210/99	230/110	300/149	
Chloro-Phenyl Types		NR	NR	NR	NR
Trichloroacetic Acid	50	100/38	100/38	100/38	
Trichloroethane[5,6]	100	100/38	100/38	120/49	NR
Trichloroethylene[6]	100	NR	NR	NR	NR
Trichloromonofluoromethane[1,5,6]	100	80/27	80/27	100/38	NR
Trichlorophenol[5]	100	NR	NR	NR	NR
Tricresyl Phosphate (TCP)	100	160/71	160/71	160/71	
Tridecylbenzene Sulfonate	All	210/99	210/99	210/99	180/82
Triethanolamine	100	120/49	120/49	150/65	
Trimethylene Chlorobromide[6]	100	NR	NR	100/38	NR
Trisodium Phosphate	Sat'd	210/99	210/99	250/121	180/82
Turpentine	100	150/65	150/65	210/99	100/38
Tween Surfactant	All	210/99	210/99	210/99	150/65
U					
Urea	0-50	160/71	160/71	160/71	150/65

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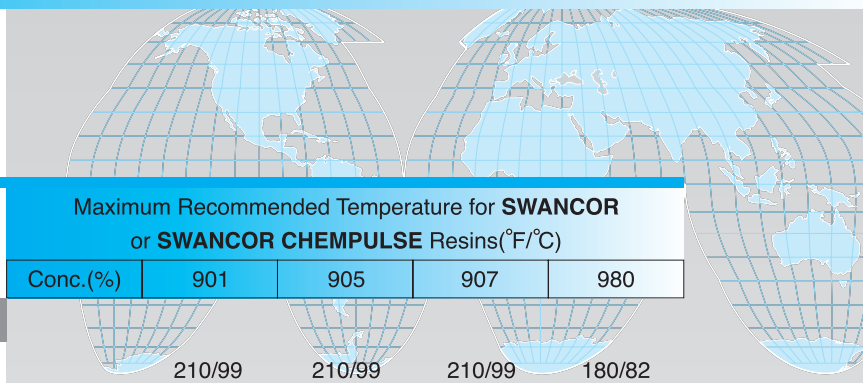

Chemical

Chemical	Conc.(%)	Maximum Recommended Temperature for **SWANCOR** or **SWANCOR CHEMPULSE** Resins(°F/°C) 901	905	907	980
V					
Vegetable Oils		210/99	210/99	210/99	180/82
Vinegar		210/99	210/99	210/99	150/65
Vinyl Acetate[6] VAC	100	NR	NR	NR	NR
Vinyltoluene	100	80/27	80/27	120/49	NR
W					
Water					
Deionized[4]	100	180/82	180/82	180/82	180/82
Distilled[4]		180/82	180/82	180/82	180/82
Sea		180/82	180/82	180/82	180/82
White Liquor (Pulp Mill)[1,4]		180/82	180/82	100/38	180/82
X					
Xylene[5,6]	100	80/27	80/27	120/49	NR
Z					
Zinc Chlorate	Sat'd	210/99	210/99	250/121	180/82
Zinc Nitrate	Sat'd	210/99	210/99	250/121	180/82
Zinc Plating Solution[1,4]		180/82	180/82	100/38	180/82
9% Zinc Cyanide					
4% Sodium Cyanide					
9% Sodium Hydroxide					
Zinc Plating Solution[1]		200/93	200/93	200/93	180/82
49% Zinc Fluoborate					
5% Ammonium Chloride					
6% Ammonium Fluoroborate					
Zinc Sulfate	All	210/99	210/99	250/121	180/82

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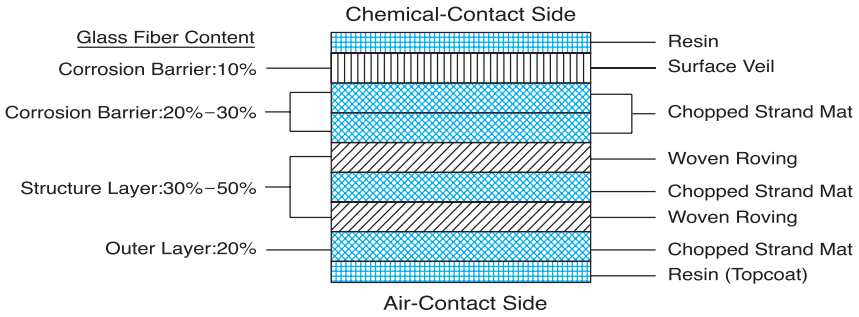
APPENDIX

1. Typical construction of chemical process equipment according to Product Standard of National Bureau of Standards, NBS PS15-69



2. ASTM Reinforced Plastics Related Standards

STANDARDS FOR CORROSION RESISTANT EQUIPMENT

ASTM D2105 Standard Specifications for Longitudinal Tensile Properties or Reinforced Thermosetting Plastic Pipe and Tube
ASTM D2143 Standard Specifications for Cyclic Pressure Strength of Reinforced, Thermosetting Plastic Pipe
ASTM D2310 Standard Specifications for Reinforced Thermosetting Resin Pipe
ASTM D2517 Standard Specifications for Reinforced Thermosetting Plastic Gas Pressure Pipe and Fittings
ASTM D2924 Standard Specifications for External Pressure Resistance of Plastic Pipe
ASTM D2925 Standard Specifications for Beam Deflection of Reinforced Thermosetting Resin Pipe Under Full Bore Flow, Measuring
ASTM D2992 Standard Specifications for Obtaining Hydrostatic Design Basis for Reinforced Thermosetting Resin Pipe and Fittings
ASTM D2996 Standard Specifications for Filament Wound Reinforced Thermosetting Resin Pipe
ASTM D2997 Standard Specifications for Centrifugally Cast Reinforced Thermosetting Plastic Pipe
ASTM D3184 Standard Specifications for Reinforced Thermosetting Resin Sewer Pipe
ASTM D3262 Standard Specifications for Reinforced Plastic Mortar Sewer Pipe
ASTM D3299 Standard Specifications for Filament Wound Glass Fiber Reinforced Thermoset Resin Chemical Resistant Tanks
ASTM D4097 Standard Specifications for Contact Molded Glass Fiber Reinforced Thermoset Resin Chemical Resistant Tanks
ASTM D4162 Standard Specifications for Reinforced Thermosetting Resin Sewer Pipe and Industrial Pressure Pipe
ASTM D4163 Standard Specifications for Reinforced Thermosetting Resin Pressure Pipe

MECHANICAL PROPRETIES OF COMPOSITES

ASTM D256 Test Method for Impact Resistance of Plastic and Electrical Insulation Materials
ASTM D638 Test Method for Tensile Properties of Plastics
ASTM D648 Test Method for Deflection Temperature of Plastic Under Flexural Load
ASTM D695 Test Method for Compressive Properties of Rigid Plastics
ASTM D790 Test Method for Flexural Properties of Unreinforced and Reinforced Plastic and Electrical Insulating Materials
ASTM D2583 Test Method for Indention of Hardness of Rigid Plastics by Means of a Barcol Impressor
ASTM D2584 Test Method for Ignition Loss of Cured Reinforced Resins

CORROSION RESISTANCE OF COMPOSITES

ASTM C581 Practice for Determining Chemical Resistance of Thermosetting Resins Used in Glass Fiber Reinforced Structures Intended for Liquid Service
ASTM C582 Specifications for Contact Molded Reinforced, Thermosetting Plastic Laminates of Corrosion Resistant Equipment
ASTM D3615 Test Methods for Chemical Resistance of Thermoset Molding Compounds Used in the Manufacture of Molded Fittings
ASTM D3681 Test Methods for Chemical Resistance of Reinforced Thermosetting Resin Pipe in a Deflected Condition
ASTM D4398 Test Methods for Determining the Chemical Resistance of Fiberglass Reinforced Thermosetting Resins by One-Sided Panel Exposure

FIRE RETARDANT PROPERTIES

ASTM D2863 Test Methods for Measuring the Minimum Oxygen Concentration to Support Candle-like Combustion of Plastics (Oxygen Index)
ASTM E84 Test Methods for Surface Burning Characteristics of Building Materials
ASTM E662 Test Methods for Specific Optical Density of Smoke

WEATHERABILITY PROPERTIES

ASTM E4329 Operating Light and Water-Exposure Apparatus (Fluorescent UV-Condensation Type) for Exposure of Plastics

THERMAL AND ELECTRICAL PROPERTIES

ASTM D149 Test Methods for Dielectric Breakdown Voltage and Dielectric Strength of Solid Electrical Insulating Materials at Commercial Power Frequencies
ASTM D150 Test Methods for A-C Loss Characteristics and Permittivity (Dielectric Constant) of Solid Electrical Insulating Materials
ASTM D257 Test Methods for D-C Resistance or Conductance of Insulating Materials
ASTM D495 Test Methods for High Voltage, Low Current, Dry Arc Resistance of Solid Electrical Insulation
ASTM D696 Test Methods for Coefficient of Linear Thermal Expansion of Plastics