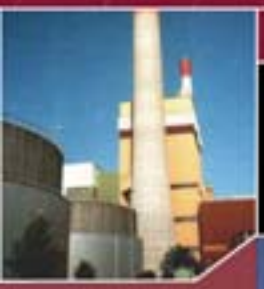
DERAKANE®
EPOXY VINYL ESTER



COMPOSITE POLYMERS

DERAKANE *Epoxy Vinyl Ester Resins*

CHEMICAL RESISTANCE GUIDE
GUIDE DE RÉSISTANCE CHIMIQUE
BESTÄNDIGKEITSLISTE
GUÍA DE RESISTENCIA QUÍMICA

ASHLAND

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Chemical Resistance Table: Maximum Service Temperatures for DERAKANE and DERAKANE MOMENTUM™ Resins

Chemical Environment	Concentration %	DERAKANE or DERAKANE MOMENTUM Resin 411 °C/°F	441 °C/°F	470 °C/°F	510A/C °C/°F	510N °C/°F	8084 °C/°F
Acetaldehyde	20	40/100	40/100	40/100	40/100	40/100	40/100
Acetaldehyde	100	NR	NR	LS	NR		NR
Acetic Acid	0.5 - 25	100/210	100/210	100/210	100/210	100/210	65/150
Acetic Acid	26 - 50	80/180	80/180	80/180	80/180	80/180	
Acetic Acid	51 - 75	65/150	65/150	65/150	65/150	65/150	
Acetic Acid	76 - 85	45/110	45/110	45/110	45/110	45/110	
Acetic Acid, Glacial	100	NR	NR	40/100	NR	NR	NR
Acetic Anhydride	100	NR	NR	40/100	NR	NR	NR
Acetic Acid/Nitric Acid/ Chromic Oxide	3/5/3	65/150	80/180	80/180	65/150	80/180	65/150
Acetic Acid/Sulfuric Acid	20/10	100/210	100/210	100/210	100/210	100/210	65/150
Acetone	10		80/180	80/180	80/180	80/180	
Acetone	100	NR	NR	LS	NR	NR	NR
Acetone, Fumes, no condensation or coalescence	Fumes			80/180	80/180	80/180	
Acetonitrile	20	40/100	40/100	40/100	40/100	40/100	
Acetonitrile	100	NR	NR	LS	NR	NR	NR
Acetonitrile, Fumes, no condensation or coalescence	Fumes			80/180	80/180	80/180	
Acetyl Acetone	20	40/100	40/100	50/120	40/100	50/120	40/100
Acetyl Acetone	100	NR	NR	LS	NR	NR	NR
Acid Cleaner - 31% hydrochloric acid[2,8,9,13]	31	65/150	70/160	80/180[15]	65/150	80/180[15]	65/150
Acrolein (Acrylaldehyde)	20	40/100	40/100	40/100	40/100	40/100	
Acrolein (Acrylaldehyde)	100	NR	NR	LS	NR	NR	NR
Acrylamide	50	40/100	40/100	40/100	40/100	40/100	40/100
Acrylic Acid[7]	25	40/100	40/100	40/100	40/100	40/100	40/100
Acrylic Acid	100	NR	NR	40/100	NR	NR	NR
Acrylic Latex	All	80/180	80/180	80/180	80/180	80/180	
Acrylonitrile	20	40/100	40/100	40/100	40/100	40/100	
Acrylonitrile	100	NR	NR	LS	NR	NR	NR
Acrylonitrile Latex Dispersion[7]	2	25/80	25/80	25/80	25/80	25/80	25/80
Activated Carbon Beds, Water Treatment		80/180	100/210	100/210	80/180	100/210	65/150
Adipic Acid (1.5 g sol. in water at 25°C, sol. hot water)	23	80/180	80/180	80/180	80/180	80/180	
Adogen (see Quaternary Amine Salts)							
Air[16]		180/360	210/410	230/450	195/380	210/410	
Alcohol, Amyl	100	50/120	60/140	65/150	50/120	60/140	50/120
Alcohol, Butyl	100	50/120	50/120	65/150	50/120	50/120	NR
Alcohol, Ethyl	95	25/80	25/80	40/100	25/80	25/80	NR

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Alcohol, Isodecyl	100	50/120	65/150	80/180	50/120	65/150	50/120
Alcohol, Propyl	100	50/120	50/120	50/120	50/120	50/120	NR
Alkaline Cleaner (see Sodium and Potassium Hydroxides)							
Alkaline Solutions (see Sodium, Potassium, and Ammonium Hydroxides, and Carbonates)							
Alkane Sulfonate (see Sodium Dodecylbenzene Sulfonate)							
Alkyl (C8-C10) Dimethyl Amine	100	80/180	95/200	100/210	80/180	95/200	
Alkyl (C8-C18) Chloride	> 0.5	80/180	95/200	100/210	95/200	100/210	
Alkyl Aryl Sulfonic Acid (see Alkyl Benzene Sulfonic Acid)							
Alkyl Benzene Sulfonic Acid[6]	> 0.5	80/180	95/200	100/210	95/200	100/210	
Alkyl Tolyl Trimethyl Ammonium Chloride		40/100	50/120	50/120	40/100	50/120	
Allyl Alcohol	100	NR	NR	25/80	NR	NR	NR
Allyl Chloride	100	25/80	25/80	25/80	25/80	25/80	NR
Alpha-Oleum Sulfates	100	50/120	50/120	50/120	50/120	50/120	
Alpha-Methylstyrene	100	25/80	40/100	50/120	25/80	40/100	NR
Alum	Sat'd	100/210	120/250	120/250	100/210	120/250	80/180
Alumina Hydrate	All	80/180	80/180	80/180	80/180	80/180	80/180
Aluminum Chloride	Sat'd	100/210	120/250	120/250	100/210	120/250	80/180
Aluminum Chlorohydrate	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180
Aluminum Chlorohydrate/ Hydrochloric Acid[9,10,12]	> 0.5/<15	80/180	100/210	100/210	80/180	100/210	65/150
Aluminum Chlorohydroxide	50	100/210	100/210	100/210	100/210	100/210	80/180
Aluminum Fluoride	All	25/80	25/80	25/80	25/80	25/80	25/80
Aluminum Hydroxide	100	80/180	80/180	95/200	80/180	80/180	80/180
Aluminum Nitrate	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180
Aluminum Potassium Sulfate	Sat'd	100/210	120/250	120/250	100/210	120/250	80/180
Aluminum Sulfate	Sat'd	100/210	120/250	120/250	100/210	120/250	80/180
Aluminum Sulfate Reactor[10]	> 0.5	100/210	100/210		100/210		
AMBITROL* Ethylene Glycol	> 0.5	100/210	100/210	100/210	100/210	100/210	
Amine Salts	All	50/120	65/150	65/150	50/120	65/150	
Amino Acids	All	40/100	40/100	40/100	40/100	40/100	
Ammonia	Liquified Gas	NR	NR	NR	NR	NR	NR
Ammonia Gas	100	40/100	40/100	40/100	40/100	40/100	40/100
Ammonia Vapors (Wet)	40 vol %	80/180	80/180	80/180	80/180	80/180	
Ammonia, Aqueous (see Ammonium Hydroxide)							
Ammonium Acetate	> 0.5	25/80	25/80	40/100	25/80	25/80	NR
Ammonium Bicarbonate	0.5 - 50	70/160	70/160	70/160	70/160	70/160	70/160

* Dow Chemical

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Chemical Resistance Table: Maximum Service Temperatures for DERAKANE and DERAKANE MOMENTUM™ Resins—*continued*

Chemical Environment	Concentration %	DERAKANE or DERAKANE MOMENTUM Resin 411 °C/°F	441 °C/°F	470 °C/°F	510A/C °C/°F	510N °C/°F	8084 °C/°F
Ammonium Bifluoride[1]	> 0.5	65/150	65/150	65/150			65/150
Ammonium Bisulfite Black Liquor		80/180	80/180	80/180	80/180	80/180	
Ammonium Bisulfite Cooking Liquor		65/150	65/150	65/150	65/150	65/150	
Ammonium Bromate	0.5 - 43	70/160	70/160	70/160	70/160	70/160	70/160
Ammonium Bromide	0.5 - 43	70/160	70/160	70/160	70/160	70/160	70/160
Ammonium Carbonate	> 0.5	65/150	65/150	65/150	65/150	65/150	65/150
Ammonium Chloride	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180
Ammonium Citrate	> 0.5	65/150	65/150	65/150	65/150	65/150	65/150
Ammonium Fluoride[1]	> 0.5	65/150	65/150	65/150	65/150	65/150	65/150
Ammonium Hydroxide[1]	0.5 - 5	80/180	80/180	65/150	80/180	65/150	80/180
Ammonium Hydroxide[1]	6 - 20	65/150	65/150	40/100	65/150	40/100	65/150
Ammonium Hydroxide[1]	30 (as NH3)	40/100	40/100	40/100	40/100	40/100	40/100
Ammonium Hydroxide/ Ammonium Chloride/ Ammonium Carbonate[1]	30 (as NH3) 35/5	40/100	40/100		40/100	40/100	40/100
Ammonium Lauryl Sulfate	0.5 - 30	50/120	50/120	50/120	50/120	50/120	50/120
Ammonium Ligno Sulfonate	0.5 - 50	80/180	80/180	80/180	80/180	80/180	65/150
Ammonium Molybdate	> 0.5	65/150					65/150
Ammonium Nitrate	Sat'd	100/210	65/150	65/150	105/220	120/250	80/180
Ammonium Oxalate	> 0.5	65/150	65/150				
Ammonium Pentaborate	0.5 - 12	50/120	50/120				50/120
Ammonium Perchlorate	0.5 - 15	75/170					
Ammonium Persulfate	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180
Ammonium Phosphate, dibasic	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180
Ammonium Phosphate, monobasic	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180
Ammonium Polysulfide	> 0.5	50/120	50/120	65/150			50/120
Ammonium Sulfate	Sat'd	100/210	120/250	120/250	105/220	120/250	80/180
Ammonium Sulfate/ Ethyl Alcohol/Ethoxylate	60/15/3	40/100	50/120	65/150	40/100	50/120	40/100
Ammonium Sulfide (Bisulfide)	Sat'd	50/120	50/120	50/120			50/120
Ammonium Sulfite	Sat'd	65/150	65/150	65/150	65/150		65/150
Ammonium Thiocyanate	0.5 - 20	100/210	100/210	100/210	100/210	100/210	80/180
Ammonium Thiocyanate	Sat'd	50/120	50/120	50/120	50/120	50/120	
Ammonium Thioglycolate	All	40/100	40/100	40/100	40/100	40/100	
Ammonium Thiosulfate	All	60/140	60/140	60/140	60/140	60/140	
Amyl Acetate	> 0.5	20/70	40/100	50/120			
Amyl Alcohol	100	50/120	60/140	65/150	50/120	60/140	50/120
Amyl Alcohol, Vapor	100	50/120	100/210	100/210	50/120	100/210	
Amyl Chloride	100	50/120	50/120	50/120	50/120	50/120	
Aniline	20	40/100	40/100	40/100	40/100	40/100	
Aniline	100	NR	NR	20/70	NR	NR	NR
Aniline Hydrochloride	> 0.5	80/180	80/180	80/180	80/180	80/180	
Aniline Sulfate	> 0.5	100/210	100/210	100/210	100/210	100/210	

* Dow Chemical

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Animal Fat	100	80/180	100/210				
Anionic Surfactant	All	40/100	50/120	50/120	40/100	50/120	
Anionic/Cationic Polymer Emulsions in Kerosene or Petroleum Distillates/Water	0 - 50	40/100	50/120	50/120			
Anodize (15% Sulfuric acid)		100/210	100/210	100/210	100/210	100/210	
Antimony Pentachloride, for aqueous solutions (see Hydrochloric Acid)	> 99	40/100	40/100	40/100	40/100	40/100	40/100
Aqua Regia[6]							
Armeen* H.T. Amines (C8-C18)	100	40/100	40/100				
Aromatic Naphtha/ Naphthalene/Isopropanol	60/5/10		50/120	50/120		50/120	
Arsenic Acid	> 0.5	80/180	80/180	80/180	80/180	80/180	
Arsenic Acid/Copper Sulfate/ Sodium Dichromate	17/37/20	80/180	80/180	80/180	80/180	80/180	
Arsenic Pentoxide/ Copper Oxide/Chromic Acid	17/9/24	40/100	40/100	40/100	40/100	40/100	40/100
Arsenious Acid	19°Be	80/180	80/180	80/180	80/180	80/180	65/150
Barium Acetate	> 0.5	80/180	80/180	80/180		80/180	
Barium Bromide	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180
Barium Carbonate (slurry)	All	80/180	80/180	80/180	80/180	80/180	80/180
Barium Chloride	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180
Barium Cyanide	> 0.5	65/150	65/150	65/150	65/150	65/150	65/150
Barium Hydroxide	> 0.5	65/150	65/150	65/150	65/150	65/150	65/150
Barium Sulfate	Sat'd	100/210	120/250	120/250	100/210	120/250	80/180
Barium Sulfide	> 0.5	80/180	80/180	80/180	80/180	80/180	
Barley Solution	> 0.5	75/170	75/170	NR	NR	NR	NR
Beer	> 0.5	50/120	50/120	NR	NR	NR	NR
Beet Sugar Liquor	> 0.5	80/180	80/180	NR	NR	NR	NR
o-Benzoyl Benzoic Acid	All	100/210	100/210	100/210	100/210	100/210	65/150
Benzaldehyde	100	NR	NR	20/70	NR	NR	NR
Benzalkonium Chloride	Dilute	40/100	40/100				40/100
Benzene	100	NR	NR	40/100	NR	LS	NR
Benzene, 120°F	100	NR	NR	50 LS/120 LS	NR	50 LS/120 LS	NR
Benzene Sulfonic Acid[6]	> 0.5	65/150	65/150	65/150	65/150	65/150	65/150
Benzene, Vapor		25/80	25/80	50/120	NR	25/80	NR
Benzene/Methyl Tertiary Butyl Ether	80/20	NR	NR	40/100	NR	LS	NR
Benzene/Ethylbenzene/ Toluene/Trimethylbenzene/ Xylene	All	NR	NR	40/100	NR	LS	NR
Benzene/Ethylbenzene	33/67	NR	25/80	40/100	NR	25/80	NR
Benzoic Acid	Sat'd	100/210	100/210	100/210	100/210	100/210	80/180
Benzyl Alcohol	20	40/100	50/120	50/120	40/100	50/120	40/100

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* Akyo Nobel

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Benzyl Alcohol	100	NR	25/80	40/100	NR	25/80	NR
Benzyl Chloride	100	NR	NR	25/80	NR	NR	NR
Benzyltrimethylammonium Chloride	60	40/100	40/100	40/100	40/100	40/100	
Black Liquor (Pulp & Kraft Mill)[1,2]	Thin	80/180	80/180	80/180	80/180	80/180	
Black Liquor (Pulp & Kraft Mill) Thick, Heavy[1,2]	Thick	95/200	105/220	105/220	105/220	105/220	
Black Liquor Recovery, Furnace Gases[6,16]		165/325	175/350	205/400	165/325	175/350	
Blow Down (Non-Condensable Gases from Pulp Digester, i.e., Dimethyl Sulfide and Mercaptanes)[8]		120/250	120/250	120/250	120/250	120/250	
Borax	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180
Boric Acid	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180
Boron Trichloride Scrubbing	> 0.5	65/150	65/150	65/150	65/150	65/150	
Brake Fluids	100	50/120	50/120	50/120[7]	50/120	50/120	50/120
Brass Plating Solution: 3% Copper, 1% Zinc, 5.6% Sodium Cyanides, 3.0% Sodium Carbonate[1]		80/180	80/180	80/180	80/180	80/180	80/180
Brine Mixture (0.4% $MgSO_4$, 9.5% NaCl, 5.0% $Na2SO_4$, 2.0% K_2SO_4, 7% $CaSO_4/2H_2O$, 3% $Na_2SO3/9H_2O$, pH 7)		100/210	100/210	100/210	100/210	100/210	80/180
Brine, Chlorinated (see Chlorinated Brine)							
Brine, Salt	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180
Brine, Salt	Sat'd	100/210	120/250	120/250	110/230	120/250	80/180
Brominated Phosphate Ester	> 0.5			50/120			
Bromine, Dry Gas	100	40/100	40/100	40/100[7]	40/100	40/100	40/100
Bromine, Liquid	100	NR	NR	NR	NR	NR	NR
Bromine, Wet Gas	100	40/100	40/100	40/100	40/100	40/100	40/100
Brown Stock		95/200	95/200	80/180	95/200	80/180	
Bunker C Fuel Oil (heavy fraction)	100	100/210	105/220	105/220	100/210	105/220	65/150
Butadiene (Gas)[2]	100	45/110	45/110	45/110	45/110	45/110	45/110
Butane	100	60/140	60/140	60/140	60/140	60/140	60/140
Butanol	100	50/120	50/120	65/150	50/120	50/120	NR
2,2-Butoxyethoxyethanol (DOWANOL* DB)	100	40/100	40/100	40/100	40/100	40/100	NR
2-Butoxyethanol (DOWANOL EB)	20	40/100	50/120	50/120	40/100	50/120	40/100
2-Butoxyethanol (DOWANOL EB)	100	40/100	40/100	40/100	40/100	40/100	NR
Butyl Acetate	100	NR	25/80	30/90	NR	25/80	NR
Butyl Acrylate	100	NR	NR	25/80	NR	NR	NR

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Butyl Alcohol	100	50/120	50/120	65/150	50/120	50/120	NR
Butyl Alcohol/Benzene	93/4	NR	40/100	50/120	NR	40/100	NR
Butyl Amine	100	NR	NR	LS	NR	NR	NR
Butyl Benzoate	70			40/100			
Butyl Benzyl Phthalate	100	80/180	100/210	100/210	80/180	100/210	
Butyl Carbitol, Diethylene Glycol Butyl Ether (DOWANOL DB)	100	40/100	40/100	40/100	40/100	40/100	
Butyl CELLOSOLVE* Solvent (DOWANOL EB)	100	40/100	40/100	40/100	40/100	40/100	
Butyl Chloride	0.1 - 100	NR	LS	25/80	NR	LS	NR
Butyl Hypochlorite	98	NR	NR	NR	NR	NR	NR
Butyl Stearate (5% in Mineral Spirits)		40/100	40/100				
Butylene Glycol	100	70/160	80/180	80/180	70/160	80/180	
Butylene Oxide	100	NR	NR	LS	NR	NR	NR
Butyraldehyde	100	NR	NR	40/100	NR	NR	NR
Butyric Acid	0.5 - 50	100/210	100/210	100/210	100/210	100/210	
Butyric Acid	100	25/80	50/120	50/120	25/80	50/120	
Cadmium Chloride	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180
Cadmium Cyanide Plating Bath, (3% Cadmium Oxide, 10% Sodium Cyanide, 1.2% Sodium Hydroxide)[1]		80/180	80/180	80/180	80/180	80/180	80/180
Calcium Bisulfite	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180
Calcium Bromide	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180
Calcium Carbonate (slurry)	All	80/180	80/180	80/180	80/180	80/180	80/180
Calcium Chlorate	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180
Calcium Chloride	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180
Calcium Chloride	Sat'd	100/210	120/250	120/250	105/220	120/250	80/180
Calcium Hydroxide[1]	100	100/210	100/210	100/210	100/210	100/210	80/180
Calcium Hydroxide Slurry[1]	0.5 - 25	80/180	65/150	40/100	80/180	65/150	65/150
Calcium Hypochlorite[1,2,3,5]	All	80/180	80/180	40/100	80/180	80/180	80/180
Calcium Nitrate	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180
Calcium Sulfate Slurry	All	100/210	100/210	100/210	100/210	100/210	80/180
Calcium Sulfite	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180
Calgon** (Product E) Sodium Hexametaphosphate	All	50/120	50/120				
Cane Sugar Liquor & Sweetwater	All	80/180	80/180				
Capric Acid (Decanoic Acid)[4]	> 0.5	80/180	80/180	80/180	80/180	80/180	80/180
Capric Acid/Lauric Acid/ Fatty Acids (C10-C18)	70/15/15	80/180	80/180	95/200	80/180	80/180	80/180
Caproic Acid (Hexanoic Acid)	100	25/80	50/120	50/120	25/80	50/120	25/80
Caprolactam	0 - 50	40/100	40/100	40/100	40/100	40/100	40/100

C

* Union Carbide
** Calgon Corporation

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Caprolactam	100	NR	NR	LS	NR	NR	NR
Caprolactone	100	NR	NR	LS	NR	NR	NR
Caprylic Acid (Octanoic Acid)	100	80/180	100/210	100/210	80/180	100/210	
Caramel	All	50/120	50/120				
Carbon Dioxide Gas[16]	All	165/325	175/350	205/400	165/325	175/350	80/180
Carbon Disulfide	100	NR	NR	LS	NR	NR	NR
Carbon Disulfide Fumes, no condensation or coalesence	All	40/100	65/150	65/150	40/100	65/150	NR
Carbon Monoxide Gas[16]	All	165/325	175/350	205/400	165/325	175/350	80/180
Carbon Tetrachloride	100	65/150	80/180	80/180	65/150	80/180	
Carbon Tetrachloride, Vapor	All	80/180	95/200	95/200	80/180	95/200	
CARBOWAX* Polyethylene Glycol	100	65/150	80/180	80/180	65/150	80/180	65/150
Carboxyethyl Cellulose	10	65/150	65/150	65/150	65/150	65/150	65/150
Cascade** Detergent in Solution	All	80/180	80/180	80/180	80/180	80/180	80/180
Cashew Nut Oil	100	65/150	65/150				
Castor Oil (Ricinus Oil)	100	70/160	70/160	70/160	70/160	70/160	70/160
Cationic/Anionic Polymer Emulsions in Kerosene or Petroleum Distillates/Water	0 - 50	40/100	50/120	50/120			
Caustic (see Sodium Hydroxide)							
Cetyl Alcohol (Hexadecanol)	100	65/150	80/180	80/180	65/150	80/180	50/120
Chlordimeform (Galecron*** Insecticide)	100	25/80	50/120	50/120	25/80	50/120	
Chloric Acid	All	25/80	25/80	25/80	25/80	25/80	25/80
Chlorinated Brine, pH < 2.5	Sat'd Cl2	80/180	80/180	95/200	80/180	95/200	
Chlorinated Brine, pH > 9 (Hypochlorite)[1,2,3]	Sat'd Cl2	80/180	80/180	65/150	80/180	65/150	
Chlorinated Brine, pH 2.5-9[6]	Sat'd Cl2	LS	LS	LS	LS	LS	LS
Chlorinated Pulp[6]	All	80/180	90/195	95/200	90/195	95/200	
Chlorinated Solvent Recovery (see Specific Solvents)							
Chlorinated Wax	All	80/180	80/180	80/180	80/180	80/180	
Chlorination Washer (Hoods & Vent Systems)	Vapors, All	80/180	95/200	95/200	80/180	95/200	65/150
Chlorine Dioxide Generator Effluent, R2 System		65/150	80/180	80/180	65/150	80/180	65/150
Chlorine Dioxide Scrubber[1,2,3]		75/170	75/170		75/170		
Chlorine Dioxide, Chlorine (Bleaching Solution, with or without Pulp)[6]	All	80/180	90/195	95/200	90/195	95/200	

* Union Carbide
** Procter & Gamble
*** Ciba-Geigy

For notes in English, see page 6; French, see page 14, German, see page 22; Spanish, see page 30.

Chemical Environment	Concentration %	DERAKANE or DERAKANE MOMENTUM Resin 411 °C/°F	441 °C/°F	470 °C/°F	510A/C °C/°F	510N °C/°F	8084 °C/°F
Chlorine Dioxide, No Chlorine (Bleaching Solution, with or without Pulp)[6]	All	80/180	90/195	95/200	90/195	95/200	
Chlorine Dioxide, Solution Storage	Sat'd	20/70	20/70	20/70	20/70	20/70	
Chlorine Water, pH < 2.5	Sat'd Cl2	80/180	80/180	95/200	80/180	95/200	
Chlorine Water, pH > 9 (Hypochlorite)[1,2,3]	Sat'd Cl2	80/180	80/180	65/150	80/180	65/150	
Chlorine Water, pH 2.5-9[6]	Sat'd Cl2	LS	LS	LS	LS	LS	LS
Chlorine, Dry Gas[2,8]	100	100/210	105/220	120/250	105/220	120/250	80/180
Chlorine, Wet Gas[2,8]	100	100/210	105/220	120/250	105/220	120/250	80/180
Chlorine/Chlorine Dioxide/ Sulfur Dioxide	0.8/2/0.7	95/200	95/200	95/200	95/200	95/200	80/180
Chlorine-Hydrogen Chloride, with Aqueous Condensate[8,9,12,16]	8 - 10% HCl	80/180	100/210	100/210 175/350 LS	80/180	100/210	80/180
Chloroacetic Acid	0 - 25	50/120	50/120	50/120	50/120	50/120	
Chloroacetic Acid	26 - 50	40/100	40/100	40/100	40/100	40/100	
Chloroacetic Acid	51 - 79	25/80	25/80	30/90	25/80	30/90	
Chloroacetic Acid	80 - 85	25/80	25/80	25/80	25/80	25/80	
Chloroacetic Acid	86 - 100	NR	NR	LS	NR	NR	NR
Chlorobenzene	100	NR	25/80	40/100	NR	25/80	NR
Chloroform	100	NR	NR	LS	NR	NR	NR
Chloroform, Fumes, No Condensation or Coalescence	Fumes			80/180	80/180	80/180	
Chloroform/Dichloroethane/ Methylene Chloride	All	NR	NR	LS	NR	NR	NR
Chloropentane (1 to 5 Cl)	100	40/100	50/120	55/130	40/100	50/120	NR
Chloropicrin (Nitrochloroform)	100	NR	NR	LS	NR	NR	NR
Chloropyridine (tetra)	100	25/80	50/120	50/120	25/80	50/120	NR
Chlorosulfonic Acid	10	NR	NR	NR	NR	NR	NR
CHLOROTHENE* SM (1,1,1-Trichloroethane inhibited)	100	40/100	50/120	50/120	40/100	50/120	NR
Chlorotoluene	100	25/80	40/100	40/100	25/80	40/100	NR
N-Chloro-o-Tolyl (Insecticide Emulsion)	10	50/120	50/120	50/120	50/120	50/120	
Choline Chloride	> 0.5	50/120	65/150	65/150	50/120	65/150	50/120
Chrome Bath, 19% Chromic Acid with Sodium Fluorosilicate and Sulfate[1]		50/120	50/120	65/150	50/120	50/120	50/120
Chrome Reduction Process[6]	25	90/190			90/190		
Chromic Acid	0.5 - 10	65/150	65/150	65/150	65/150	65/150	65/150
Chromic Acid	11 - 20	50/120	65/150	65/150	65/150	65/150	50/120

* Dow Chemical

For notes in English, see page 6; French, see page 14, German, see page 22; Spanish, see page 30.

Chemical Resistance Table: Maximum Service Temperatures for DERAKANE and DERAKANE MOMENTUM™ Resins—*continued*

Chemical Environment	Concentration %	DERAKANE or DERAKANE MOMENTUM Resin 411 °C/°F	441 °C/°F	470 °C/°F	510A/C °C/°F	510N °C/°F	8084 °C/°F
Chromic Acid	30	LS	LS	LS	LS	LS	
Chromic Acid	40	NR	NR	LS	NR	NR	
Chromic Acid/ Sodium Metabisulfite	15/45	50/120	65/150	65/150	65/150	65/150	50/120
Chromic Acid/Nitric Acid Mixture	5/10	40/100	50/120	65/150	40/100	40/100	40/100
Chromic Acid/Sulfuric Acid Mixture (Maximum Total Concentration 10%)	10	50/120	65/150	65/150	50/120	65/150	50/120
Chromium Plate, Electroplating with a Salt Solution (with Sulfuric Acid: Not Recommended)		55/130	55/130	55/130	55/130	55/130	55/130
Chromium Sulfate (water soluble forms)	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180
Citric Acid	> 0.5	100/210	100/210	100/210	100/210	100/210	65/150
Clopidol (Coyden*)[4]	All			40/100		40/100	
Cobalt Chloride	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180
Cobalt Chloride Reactor (Hydrochloric/Sulfuric Acid)[10]	40		95/200				
Cobalt Citrate	12	80/180	80/180	80/180			50/120
Cobalt Nitrate	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180
Coconut Oil	100	80/180	95/200	95/200	80/180	95/200	80/180
Cod-liver Oil	100	40/100	40/100				
Copper Chloride	Sat'd	100/210	120/250	120/250	105/220	120/250	80/180
Copper Chloride/Ammonium Chloride/Ammonium Hydroxide (see Ammonium Hydroxide)	26/5/2						
Copper Cyanide	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180
Copper Cyanide Plating Bath (10.5% Copper and 14% Sodium Cyanides; 6% Rochelle Salts)		70/160	70/160	70/160	70/160	70/160	70/160
Copper Cyanide/ Potassium Cyanide/ Potassium Hydroxide[1]	7/2.5/2%	65/150	40/100	25/80	65/150	25/80	
Copper Matte Dipping Bath, (30% $FeCl_3$, 19% Hydrochloric acid)[8,9,13]		80/180	95/200	95/200	95/200	95/200	80/180
Copper Nitrate	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180
Copper Plating Solution (45% $Cu(BF_4)2$; 19% Copper Sulfate; 8% Sulfonic)[1]		80/180	80/180	80/180	80/180	80/180	80/180
Copper Sulfate	Sat'd	100/210	120/250	120/250	100/210	120/250	80/180
Corn Oil	100	80/180	100/210	100/210	80/180	100/210	65/150
Corn Starch	Slurry	100/210	100/210				
Corn Sugar/Syrup (Glucose)	All	80/180	80/180				
Cottonseed Oil	100	100/210	100/210	100/210	100/210	100/210	65/150
Crude Oil, Sweet, Sour	100	100/210	120/250	120/250	100/210	120/250	65/150
Cumene	100	25/80	50/120	50/120	25/80	50/120	25/80

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Chemical Environment	Concentration %	DERAKANE or DERAKANE MOMENTUM Resin 411 °C/°F	441 °C/°F	470 °C/°F	510A/C °C/°F	510N °C/°F	8084 °C/°F
Cumene/Toluene/Xylene	All	25/80	40/100	50/120	25/80	50/120	NR
Curpric Chloride, (see Copper Chloride)							
Cyanide Disposal (Reaction with Hypo gives Sodium Thiosulfite)			40/100	40/100			
Cyanuric Acid	All	25/80	40/100	50/120	25/80	40/100	
Cyanuric Chloride[4]	All	50/120	50/120	50/120	50/120	50/120	50/120
Cyclohexane	100	50/120	65/150	65/150	50/120	65/150	
Cyclohexylamine	100		LS	40/100		LS	
Cyclopentane	100	40/100	45/110	50/120	40/100	45/110	
Dalapon Grass Killer (2,2-dichloropropionic acid and sodium salt)	100	NR	25/80	40/100	NR	25/80	NR
Decanoic Acid[4]	> 0.5	80/180	80/180	80/180	80/180	80/180	80/180
Decanol	100	50/120	65/150	80/180	50/120	65/150	
Deionized Water[2]	100	80/180	80/180	80/180	80/180	80/180	80/180
Demineralized Water[2]	100	80/180	80/180	80/180	80/180	80/180	80/180
Detergents, Organic	100	70/160	80/180	95/200	70/160	80/180	70/160
De-waxed Paraffin Distillate	100	80/180	80/180	80/180	80/180	80/180	65/150
Diacetone Alcohol	10		40/100	50/120	40/100	50/120	
Diacetone Alcohol	100	NR	NR	LS	NR	NR	NR
Diallyl Phthalate	All	80/180	100/210	100/210		100/210	65/150
Diammonium Phosphate	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180
Dibasic Acid (51-61% Glutaric Acid, 18-28% Succinic Acid, 15-25% Adipic Acid, 2% Nitric Acid)	> 0.5 - 50	80/180	95/200	95/200	80/180	95/200	80/180
Dibromonitrilo-Proprionamide	100	NR	25/80	40/100	NR	25/80	NR
Dibromophenol	100	NR	40/100	40/100	NR	40/100	NR
Dibromopropane	100	NR	25/80	40/100	NR	25/80	NR
Dibromopropanol	100			40/100			
Dibutyl Carbitol (diethylene glycol dibutyl ether)	100	25/80	40/100	40/100	25/80	40/100	
Dibutyl Ether	100	25/80	50/120	80/180		65/150	
Dibutyl Sebacate	100	50/120	65/150	65/150		65/150	
Dibutyl Phthalate	100	80/180	80/180	100/210		80/180	
2,4-Dichlorophenoxyacetic Acid (Acid, Salts, Esters and Formulations)[4]		50/120	50/120	50/120	50/120	50/120	
Dichloroacetic Acid, (see Chloroacetic Acid)							
Dichlorobenzene (ortho and para)	100	NR	40/100	50/120	NR	40/100	NR
Dichloroethane	100	NR	NR	25/80	NR	NR	NR
Dichloroethylene	100	NR	NR	LS	NR	NR	NR
Dichloromethane (Methylene Chloride)	100	NR	NR	LS	NR	NR	NR
Dichloropropane	100	NR	25/80	40/100	NR	25/80	NR

For notes in English, see page 6; French, see page 14, German, see page 22; Spanish, see page 30.

Chemical Resistance Table: Maximum Service Temperatures for DERAKANE and DERAKANE MOMENTUM™ Resins—*continued*

Chemical Environment	Concentration %	DERAKANE or DERAKANE MOMENTUM Resin 411 °C/°F	441 °C/°F	470 °C/°F	510A/C °C/°F	510N °C/°F	8084 °C/°F
Dichloropropene	100	NR	NR	25/80	NR	NR	NR
Dichloropropionic Acid (see also Dalapon)	100	NR	25/80	40/100	NR	25/80	NR
Dichlorotoluene	100	25/80	50/120	50/120	25/80	50/120	NR
Diesel Fuel	100	80/180	100/210	100/210	80/180	100/210	65/150
Diethanolamine	100	50/120	50/120	65/150	50/120	50/120	
Diethanolamine/Ethanolamine	80/20	50/120	50/120	50/120	50/120	50/120	
Diethyl Carbonate	100	NR	25/80	40/100	NR	25/80	NR
Diethyl Ether	100	NR	NR	NR	NR	NR	NR
Diethyl Formamide	20	40/100	40/100	40/100	40/100	40/100	NR
Diethyl Formamide	100	NR	LS	40/100	NR	LS	NR
Diethyl Hydroxylamine	100	NR	NR	LS	NR	NR	
Diethyl Ketone	20	40/100	45/110	50/120	40/100	40/100	40/100
Diethyl Ketone	100	NR	NR	25/80	NR	NR	NR
Diethyl Sulfate	100	40/100	50/120	50/120	40/100	50/120	
Diethylamine	20	40/100	40/100	40/100	40/100	40/100	NR
Diethylamine	100	NR	NR	LS	NR	NR	NR
Diethylaminoethanol	100	50/120	50/120	50/120	50/120	50/120	40/100
Diethylbenzene	100	40/100	65/150	65/150	40/100	65/150	NR
Diethylene Glycol	100	80/180	100/210	100/210	80/180	100/210	80/180
Diethylene Glycol Dimethylether	20	40/100	40/100	40/100	40/100	40/100	NR
Diethylene Glycol Dimethylether	100	NR	NR	25/80	NR	NR	NR
Diethylenetriaminepentaacetic Acid	All	40/100	50/120	50/120	50/120	50/120	
Diethylenetriaminepentaacetic Acid, sodium salt	40	40/100	50/120	50/120	50/120	50/120	
Di-2-Ethylhexyl Phosphoric Acid (DEHPA) in Kerosene	20	80/180	80/180	80/180	80/180	80/180	
Diglycolamine (Aminoethoxyethanol)	20	40/100	50/120	50/120	40/100	50/120	40/100
Diglycolamine (Aminoethoxyethanol)	50	40/100	40/100	40/100	40/100	40/100	40/100
Diglycolamine (Aminoethoxyethanol)	100	NR	NR	LS	NR	NR	NR
Diisobutyl Ketone	100	NR	50/120	50/120	NR	50/120	NR
Diisobutyl Phthalate	100	65/150	65/150	65/150	65/150	65/150	
Diisobutylene	100	40/100	40/100	40/100	40/100	40/100	25/80
Diisonoyl Phthalate	100	65/150	100/210	100/210	65/150	100/210	65/150
Diisopropanolamine	100	50/120	50/120	65/150	50/120	50/120	40/100
Dimethyl Acetamide	20	40/100	40/100	40/100	40/100	40/100	NR
Dimethyl Acetamide	100	NR	NR	LS	NR	NR	NR
Dimethyl Acetamide, Fumes, no condensation or coalescence	Fumes			80/180	80/180	80/180	

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Chemical Environment	Concentration %	DERAKANE or DERAKANE MOMENTUM Resin 411 °C/°F	441 °C/°F	470 °C/°F	510A/C °C/°F	510N °C/°F	8084 °C/°F
Dimethyl Amine	20	40/100	40/100	40/100	40/100	40/100	40/100
Dimethyl Amine	40	LS	LS	LS	LS	LS	NR
Dimethylammonium Hydrochloride (Dimethylamine HCl, DMA-HCl)	70	40/100	40/100	50/120[7]	40/100	40/100	40/100
Dimethyl Aniline	100	NR	LS	40/100	NR	25/80	LS
Dimethyl Formamide	20	40/100	40/100	40/100	40/100	40/100	
Dimethyl Formamide	100	NR	NR	LS	NR	NR	NR
Dimethyl Formamide, Fumes, no condensation or coalescence	Fumes			80/180	80/180	80/180	
Dimethyl Morpholine	100	NR	25/80	50/120	NR	25/80	NR
Dimethyl Phthalate	100	65/150	80/180	80/180	65/150	80/180	
Dimethyl Sulfate	20	40/100	50/120	50/120	40/100	50/120	40/100
Dimethyl Sulfate	100	NR	LS	LS	NR	NR	NR
Dimethyl Sulfide	100	NR	LS	25/80	NR	25/80	NR
Dimethyl Sulfoxide	20	40/100	40/100	40/100	40/100	40/100	40/100
Dimethyl Sulfoxide	100	NR	LS	LS	NR	NR	NR
Dimethyl Sulfoxide (DMSO) - Water Solution	20			20/70			
2,2-Dimethyl Thiazolidine	1	65/150	80/180	80/180	65/150	80/180	
Dimethylcarbonate	100	NR	NR	NR	NR	NR	NR
Dimethylformamide/ Acetonitrile/Methanol	26/9/7	NR	NR	LS	NR	NR	NR
Dioctyl Phthalate	100	65/150	100/210	100/210	65/150	100/210	65/150
Diphenyl Oxide (Diphenyl Ether, Phenyl Ether)	100	25/80	40/100	50/120	25/80	50/120	NR
Dipotassium Phosphate	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180
Dipropylene Glycol	100	80/180	100/210	100/210	80/180	100/210	65/150
Dipropylene Glycol Monomethyl Ether (DOWANOL DPM)	20	40/100	50/120	65/150	50/120	65/150	40/100
Dipropylene Glycol Monomethyl Ether (DOWANOL DPM)	100	NR	LS	20/70	NR	NR	NR
Distilled Water[2]	100	80/180	80/180	80/180	80/180	80/180	80/180
Divinylbenzene	100	40/100	50/120	50/120	40/100	50/120	NR
DMA 4 Weed Killer 2,4-D	100	50/120	50/120	50/120	50/120	50/120	
DMA 6 Weed Killer	100	50/120	50/120	50/120	50/120	50/120	
Dodecanol (Lauryl Alcohol)	100	65/150	80/180	80/180	65/150	80/180	50/120
Dodecene	100	65/150	80/180	80/180	65/150	80/180	50/120
Dodecyl Benzene Sulfonic Acid[6]	100	80/180	95/200	100/210	95/200	100/210	
Dodecyl Benzene Sulfonic Acid/ Sulfuric Acid/Water/Oil	85/10/4/1	65/150	65/150	65/150	65/150	65/150	65/150
Dodecyldimethylamine	100	80/180	95/200	100/210	80/180	95/200	
Dodecylmercaptan	100	80/180	95/200	100/210	80/180	95/200	
DOWANOL DB Glycol Ether	100	40/100	40/100	40/100	40/100	40/100	NR

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Chemical Resistance Table: Maximum Service Temperatures for DERAKANE and DERAKANE MOMENTUM™ Resins—*continued*

Chemical Environment	Concentration %	DERAKANE or DERAKANE MOMENTUM Resin 411 °C/°F	441 °C/°F	470 °C/°F	510A/C °C/°F	510N °C/°F	8084 °C/°F
DOWANOL EB Glycol Ether (Ethylene Glycol n-butyl ether)	100	40/100	40/100	40/100	40/100	40/100	NR
DOWANOL PM Glycol Ether	100	NR	LS	20/70	NR	NR	NR
DOWANOL DPM (Dipropylene Glycol Monomethyl Ether)	100	NR	LS	20/70	NR	NR	NR
DOWANOL DB Diethylene Glycol n-Butyl Ether (see also Butyl CARBITOL*)	100	40/100	40/100	40/100	40/100	40/100	NR
DOWCLENE* EC Solvent		40/100	50/120	50/120	40/100	50/120	
DOWCLENE Solvent	100	50/120	50/120	50/120	50/120		
DOWEX* 50WX4 Ion Exchange Resin		100/210	100/210	100/210	100/210	100/210	
DOWFAX* 2A1 Surfactant	All	50/120	50/120	50/120	50/120	50/120	
DOWFAX 2AO Solution Surfactant	All	50/120	50/120	50/120	50/120	50/120	
DOWICIDE* Antimicrobial	All	50/120	50/120	50/120	50/120	50/120	
DOWTHERM* Heat Transfer Agent	100	50/120	65/150	65/150	50/120	65/150	
Electrosol™ Antistatic Agent (Petroleum naphtha, heavy alkylate)	All	65/150	65/150	65/150	65/150	65/150	
Epichlorohydrin	100	LS	LS	25/80	NR	NR	NR
Epoxidized Castor Oil	100	40/100	40/100				40/100
Epoxidized Soybean Oil	100	65/150	65/150	65/150	65/150	65/150	65/150
Esters, Fatty Acid	100	80/180	80/180	80/180	80/180	80/180	65/150
Ethanol (Ethyl Alcohol)	10	50/120	50/120	65/150	50/120	50/120	50/120
Ethanol (Ethyl Alcohol)	50	40/100	40/100	65/150	40/100	40/100	NR
Ethanol (Ethyl Alcohol)	90 - 95	25/80	25/80	40/100	25/80	25/80	NR
Ethanol (Ethyl Alcohol)	100	NR	LS	40/100	NR	25/80	NR
Ethanol, Fumes, no condensation or coalescence	Fumes	65/150	65/150	80/180	80/180	80/180	65/150
Ethanol/Ethylacetate/ Methanol/DMF	35/29/10/10	NR	NR	LS	NR	NR	NR
Ethanolamine	20	40/100	45/110	50/120	40/100	50/120	
Ethanolamine	100	25/80	30/90	40/100	25/80	30/90	NR
Ethephon	100		40/100	40/100			
Ethoxy Acetic Acid	10		40/100	40/100		40/100	
Ethoxy Acetic Acid	100	NR	NR	LS	NR	NR	NR
Ethoxylated Alcohol, C12-C14	100	25/80	40/100	50/120	25/80	40/100	
Ethoxylated Nonyl Phenol	100	NR	LS	40/100	NR	LS	NR
Ethyl Acetate	100	NR	LS	25/80	NR	LS	NR

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Ethyl Acetate, Fumes, no condensation or coalescence	Fumes			80/180	80/180	80/180	
Ethyl Acetate/Sodium Hydroxide[1,2]	4/0 - 50	50/120	50/120	40/100	50/120	40/100	
Ethyl Acrylate	100	NR	LS	25/80	NR	20/70	NR
Ethyl Amine	20	40/100	40/100	40/100	40/100	40/100	40/100
Ethyl Amine	70	NR	NR	LS	NR	NR	NR
Ethyl Bromide	100	NR	LS	LS	NR	LS	NR
Ethyl Chloride	100	NR	LS	25/80	NR	25/80	NR
Ethyl Ether	100	NR	NR	NR	NR	NR	NR
Ethyl Sulfate	100	40/100	40/100	40/100	40/100	40/100	40/100
2-Ethylhexyl Alcohol	100	65/150	70/160	80/180	70/160	80/180	50/120
Ethyl-3-Ethoxy Propionate	100	NR	LS	25/80	NR	LS	NR
Ethylbenzene	100	25/80	40/100	50/120	25/80	40/100	
Ethylbenzene/Benzene	67/33	NR	25/80	40/100	NR	25/80	NR
Ethylene Chloride (see Dichloroethane)	100	NR	NR	25/80	NR	NR	NR
Ethylene Chlorohydrin	20	40/100	50/120	65/150	50/120	65/150	40/100
Ethylene Chlorohydrin	100	40/100	40/100	40/100	40/100	40/100	NR
Ethylene Diamine	20	40/100	40/100	40/100	40/100	40/100	40/100
Ethylene Diamine	100	NR	NR	LS	NR	NR	NR
Ethylene Dibromide	100	NR	NR	NR	NR	NR	NR
Ethylene Dichloride (see Dichloroethane)	100	NR	NR	25/80	NR	NR	NR
Ethylene Dichloride/ Ethylene Dibromide/Tetra Ethyl Lead (above water solubility)	5/5/5	NR	NR	LS	NR	NR	NR
Ethylene Glycol	100	100/210	100/210	100/210	100/210	100/210	65/150
Ethylene Glycol Monobutyl Ether (DOWANOL EB)	20	40/100	50/120	65/150	50/120	65/150	40/100
Ethylene Glycol Monobutyl Ether (DOWANOL EB)	100	40/100	40/100	40/100	40/100	40/100	NR
Ethylene Glycol/Sulfuric Acid	0 - 40/0 - 10	65/150	80/180	80/180	80/180	80/180	
Ethylene Oxide	100	NR	NR	NR	NR	NR	NR
Ethylenediaminetetraacetic Acid (EDTA), (see VERSENE* 100 Chelating agent for the Tetrasodium Salt of EDTA)	All	80/180	80/180	80/180	80/180	80/180	80/180
Ethylenesulfonic Acid, Sodium Salt[6]	All	70/160	70/160	70/160	70/160	70/160	
Eucalyptus Oil	100	60/140	60/140	60/140	60/140	60/140	
Fatty Acid/Sterol/Triglyceride	All	100/210	120/250	120/250	100/210	120/250	65/150

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* Dow Chemical

For notes in English, see page 6; French, see page 14, German, see page 22; Spanish, see page 30.

Chemical Resistance Table: Maximum Service Temperatures for DERAKANE and DERAKANE MOMENTUM™ Resins—*continued*

Chemical Environment	Concentration %	DERAKANE or DERAKANE MOMENTUM Resin 411 °C/°F	441 °C/°F	470 °C/°F	510A/C °C/°F	510N °C/°F	8084 °C/°F
Fatty Acid/Sulfuric Acid[10]	5/2	100/210	100/210	100/210	100/210	100/210	
Fatty Acids	All	100/210	120/250	120/250	100/210	120/250	65/150
Ferric Acetate	All	80/180	80/180	80/180	80/180	80/180	
Ferric Chloride	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180
Ferric Chloride/Ferrous Chloride	5/20	100/210	100/210	100/210	100/210	100/210	80/180
Ferric Chloride/FerrousChloride/ Hydrochloric Acid	48/0.2/0.2	100/210	105/220	105/220	100/210	105/220	80/180
Ferric Chloride/ Hydrochloric Acid[8,9,12]	0 - 29/1 - 20	80/180	105/220	105/220	80/180	105/220	80/180
Ferric or Ferrous Sulfate/ Sulfuric Acid	0 - 40/0 - 25	100/210	100/210	100/210	100/210	100/210	80/180
Ferric Sulfate	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180
Ferrous Chloride	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180
Ferrous Chloride/ Hydrochloric Acid[8,9,12]	0 - 29/1 - 20	80/180	100/210	100/210	80/180	100/210	80/180
Ferrous Chloride+Manganese Chloride+Ferric Chloride/ Hydrochloric Acid[8,9,12]	1 - 60/0 - 20	80/180	100/210	100/210	100/210	100/210	80/180
Ferrous Nitrate	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180
Ferrous Sulfate	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180
Fertilizer, Uran*; Urea ammonium nitrate composition: 43.4% Ammonium Nitrate, 35.4% Urea, 20.3% Water		65/150	65/150	65/150	65/150	65/150	65/150
8-8-8 Fertilizer Composition: (Parts by wt. 30 Phosphoric Acid, 29 Ammonia, 104.3 Water, 10.4 Uran, 26.0 Potash, 3.0 Borax pH 8.2)		65/150	65/150	65/150	65/150	65/150	65/150
Flue Gas, Dry[16]	All	165/325	175/350	205/400	165/325	175/350	
Flue Gas, Wet	All	80/180	100/210	100/210	80/180	100/210	80/180
Fluoboric Acid[1,2]	All	100/210	100/210	100/210	100/210	100/210	65/150
Fluoride Salts/Hydrochloric Acid[1,2,5]	30/10	50/120	50/120	50/120	50/120	50/120	50/120
Fluorine in Flue Gas, Wet[1]	2	80/180	100/210	100/210	80/180	100/210	80/180
Fluosilicic Acid[1,2]	0 - 10	80/180	80/180	80/180	80/180	80/180	65/150
Fluosilicic Acid[1,2]	11 - 35	40/100	40/100	40/100	40/100	40/100	40/100
Fluosilicic Acid Fumes[1,2]	All	80/180	80/180	80/180	80/180		65/150
Fluosilicic/Hydrofluoric/ Phosphoric Acids[1,2]	22/5/5	40/100	40/100	40/100	40/100	40/100	40/100
Fluozirconic Acid, Fluotitanic Acid, Ammonium Hydroxide[1,2]	5/4/3	40/100	40/100	40/100	40/100	40/100	40/100
Fly Ash Slurry		80/180	80/180	80/180	80/180	80/180	80/180
Formaldehyde	All	50/120	65/150	65/150	50/120	65/150	
Formaldehyde/Methanol	0 - 37/0 - 15	50/120	65/150	65/150	50/120	65/150	
Formamide	20	40/100	50/120	65/150	50/120	65/150	40/100

* Arcadian Corporation

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Chemical Environment	Concentration %	DERAKANE or DERAKANE MOMENTUM Resin 411 °C/°F	441 °C/°F	470 °C/°F	510A/C °C/°F	510N °C/°F	8084 °C/°F
Formamide	100	20/70	20/70	20/70	20/70	20/70	
Formic Acid	10	80/180	80/180	80/180	80/180	80/180	65/150
Formic Acid	25	50/120	65/150	65/150	50/120	65/150	50/120
Formic Acid	50	50/120	50/120	50/120	50/120	50/120	
Formic Acid	85	25/80	25/80	40/100	25/80	25/80	
Formic Acid	98			40/100			
Freon* 11 and 12 Refrigerant	100	25/80	40/100	40/100	25/80	40/100	NR
Freon 113 Refrigerant		40/100	40/100	40/100	40/100	40/100	
Fuel C (50/50 Isooctane/Toluene)	100			50/120			
Fuel C/Methyl t-Butyl Ether (MTBE) Note: Fuel C is 50% toluene and 50% isooctane)	85/15			50/120			
Fuel Oil	100	80/180	100/210	100/210	80/180	100/210	65/150
Furfural[11]	0 - 10	40/100	50/120	50/120	40/100	50/120	
Furfural	100	NR	NR	LS	NR	NR	NR
Furfural in Organic Solvent[4]	0 - 20	NR	25/80	40/100	NR	40/100	
Furfural/Acetic Acid/Methanol	30/10/5	NR	NR	LS	NR	NR	NR
Furfuryl Alcohol[2]	20	40/100	50/120	65/150	40/100	50/120	40/100
Furfuryl Alcohol[2]	100	NR	NR	25/80	NR	NR	NR
Galecron (Chlordimeform) Insecticide 100		25/80	50/120	50/120	25/80	50/120	
Gallic Acid	Sat'd	80/180	80/180	80/180	80/180	80/180	
Gasohol (5% Methanol)		50/120	50/120	50/120	50/120	50/120	50/120
Gasohol (Up to 10% Alcohol)		40/100	40/100	50/120	NR	40/100	NR
Gasohol (10-100% Alcohol)		NR	NR	40/100	NR	NR	NR
Gasoline, Aviation	100	80/180	80/180	80/180	80/180	80/180	65/150
Gasoline, Leaded	100	80/180	80/180	80/180	80/180	80/180	65/150
Gasoline, No Lead, No Methanol	100	50/120	65/150	65/150	50/120	65/150	
Gasoline/MTBE	85/15	40/100	40/100	50/120			
Glucose	100	80/180	80/180				
Glutamic Acid	50	50/120	50/120	50/120	50/120	50/120	
Glutaraldehyde	50	50/120	50/120	50/120	50/120	50/120	50/120
Glutaric Acid	50	50/120	50/120	50/120	50/120	50/120	
Glycerine	100	100/210	100/210	100/210	100/210	100/210	65/150
Glycine and Derivatives	All	40/100	40/100	40/100	40/100	40/100	
Glycol	100	100/210	100/210	100/210	100/210	100/210	65/150
Glycolic Acid (Hydroxyacetic acid)	70	40/100	40/100	40/100	40/100	40/100	
Glyconic Acid	50	80/180	80/180	80/180	80/180	80/180	65/150

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* E. I. DuPont de Nemours & Co., Inc.

For notes in English, see page 6; French, see page 14, German, see page 22; Spanish, see page 30.

Chemical Resistance Table: Maximum Service Temperatures for DERAKANE and DERAKANE MOMENTUM™ Resins—*continued*

Chemical Environment	Concentration %	DERAKANE or DERAKANE MOMENTUM Resin 411 °C/°F	441 °C/°F	470 °C/°F	510A/C °C/°F	510N °C/°F	8084 °C/°F
Glyoxal	40	40/100	40/100	40/100	40/100	40/100	
Glyphosate	All		40/100	40/100		40/100	
Gold Plating Solution (23% Potassium Ferrocyanide with Potassium Gold Cyanide and Sodium Cyanide)		100/210	100/210	100/210	100/210	100/210	80/180
Goodrite K702/732 Product (Sodium Polyacrylate Disperants)		80/180	80/180	80/180	80/180	80/180	
Green Liquor[1,2]	All	80/180	80/180	80/180	80/180	80/180	80/180
Gypsum Slurry (see also Calcium Sulfate)	All	100/210	100/210	100/210	100/210	100/210	80/180
Hard Chrome Plating Baths (with Sulfuric Acid: Not Recommended)		60/140	60/140				
Heptane	100	100/210	100/210	100/210	100/210	100/210	80/180
Heptane, Fumes, no condensation or coalescence	Fumes	80/180	80/180	80/180	80/180	80/180	80/180
Herbicides[14]		50/120	50/120	50/120	50/120	50/120	50/120
Hexachloroethane	100	LS	40/100	50/120	LS	40/100	NR
Hexadecanol	100	65/150	80/180	80/180	65/150	80/180	50/120
Hexamethylenetetramine	40	40/100	50/120	50/120	40/100	50/120	
Hexane	100	70/160	70/160	70/160	70/160	70/160	
Hexanoic Acid	100	25/80	50/120	50/120	25/80	50/120	25/80
Hot Stack Gas (see Flue Gas)							
Hydraulic Fluid (Glycols)[14]	100	80/180	80/180	80/180	80/180	80/180	
Hydrazine	20		LS	LS	LS	LS	
Hydrazine	100	NR	NR	LS	NR	NR	NR
Hydrazine/Sodium Phosphate	5/10		LS	LS	LS	LS	
Hydriodic Acid	40	65/150	65/150	65/150	65/150	65/150	65/150
Hydriodic Acid	57		40/100	40/100	40/100	40/100	
Hydrobromic Acid	0 - 25	80/180	80/180	80/180	80/180	80/180	80/180
Hydrobromic Acid	48	65/150	65/150	65/150	65/150	65/150	65/150
Hydrobromic Acid	62	40/100	40/100	40/100	40/100	40/100	40/100
Hydrobromic Acid/Bromine	40/2		40/100	40/100	40/100	40/100	
Hydrochloric Acid[9,12]	1 - 15	80/180	105/220	110/230	100/210	105/220	80/180
Hydrochloric Acid[8,9,12]	16 - 20	80/180	105/220	110/230	100/210	105/220	80/180
Hydrochloric Acid[8,9,12]	21 - 25	65/150	80/180	100/210	80/180	80/180	80/180
Hydrochloric Acid[8,9,12]	26 - 30	65/150	80/180	95/200	80/180	80/180	80/180
Hydrochloric Acid[8,9,13]	31 - 32	65/150	70/160	80/180[15]	65/150	80/180[15]	65/150
Hydrochloric Acid[8,9,13]	33 - 34	50/125	50/125	70/160[15]	50/125	70/160[15]	50/125
Hydrochloric Acid[8,9,13]	35 - 36	50/125	50/125	60/140[15]	50/125	60/140[15]	50/125
Hydrochloric Acid[8,9,13]	37	40/100	45/110	50/125[15]	40/100	50/120[15]	
Hydrochloric Acid & Dissolved Organics[8,9,13]	0 - 33% HCl	NR		65/150[15]			NR

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Chemical Environment	Concentration %	DERAKANE or DERAKANE MOMENTUM Resin 411 °C/°F	441 °C/°F	470 °C/°F	510A/C °C/°F	510N °C/°F	8084 °C/°F
Hydrochloric Acid + Aluminum + Aluminum chloride[9,10,12]	< 15% HCl	80/180	100/210		80/180		
Hydrochloric Acid/Aluminum Chloride[8,9,12]	30/0 - 40	65/150	70/160	80/180[15]	65/150	80/180[15]	65/150
Hydrochloric Acid + Chlorine[9,12]	0.5 - 20% HCl	80/180	90/195	100/210	80/180	100/210	80/180
Hydrochloric Acid, Fumes + Free Chlorine, dry above 210°F/100°C[8,9,12,16]			175/350	175/350		175/350	
Hydrochloric Acid, Fumes[9,16]		100/210	175/350	175/350	100/210	175/350	80/180
Hydrochloric Acid/Bromine/ Chlorine[8,9,12]	22/0.1/0.1	65/150	80/180	100/210	80/180	80/180	80/180
Hydrochloric Acid/Calcium Chloride[8,9,12]	27/15	65/150	80/180	95/200	80/180	80/180	80/180
Hydrochloric Acid/Diethylene Triamine (as Hydrochloride)/ Ammonium Chloride[8,9,13]	< 33/>10/10			65/150			
Hydrochloric Acid/ Ferric Chloride[8,9,12]	1 - 20/0 - 29	80/180	105/220	105/220	80/180	105/220	80/180
Hydrochloric Acid/ Ferric Chloride/Organics[2,8,9,13]	28/35/1	NR	NR	65/150	NR	NR	NR
Hydrochloric Acid/ Ferrous Chloride[8,9,12]	1 - 20/0 - 29	80/180	100/210	100/210	80/180	100/210	80/180
Hydrochloric Acid/ Formaldehyde[2,8,9,13]	25/3	NR	NR	65/150	NR	NR	NR
Hydrochloric/ Hydrofluoric Acid[1,2,8,13]	36/1		40/100	40/100[15]		40/100[15]	
Hydrochloric Acid/ Hydrofluoric Acid[1,2,8,13]	Max. Total 20	40/100	40/100	40/100	40/100	40/100	40/100
Hydrochloric/ Hydrofluoric Acid[1,2,13]	15/0.1 - 1	80/180	100/210	100/210	100/210	100/210	80/180
Hydrochloric/ Hydrofluoric Acid[1,2,8,13]	25/6	40/100	45/110	50/125	40/100	50/120	
Hydrochloric/Hydrofluoric/ Phosphoric Acid, Nitrobenzene[1,2]	15/1/1/0.5	NR	LS	40/100	NR	LS	NR
Hydrochloric/Hydrofluoric/ Xylene	15/15/70			NR			
Hydrochloric/Hydrofluoric Acid[1,2,8,13]	0.5 - 20/0 - 1	65/150	80/180	80/180	65/150	80/180	
Hydrochloric/Hydrofluoric Acid[1,2,8,13]	30/15			40/100			
Hydrocyanic Acid	All	100/210	100/210	100/210	100/210	100/210	80/180
Hydrofluoric Acid[1,2]	10	65/150	65/150	65/150	65/150	65/150	65/150
Hydrofluoric Acid[1,2]	20	40/100	40/100	40/100	40/100	40/100	40/100
Hydrofluoric/Nitric Acid[1,2]	15/15			40/100		40/100	
Hydrofluoric/Nitric Acid[1,2]	6/20	50/120	50/120	60/140	55/130	60/140	40/100

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Chemical Resistance Table: Maximum Service Temperatures for DERAKANE and DERAKANE MOMENTUM™ Resins—*continued*

Chemical Environment	Concentration %	DERAKANE or DERAKANE MOMENTUM Resin 411 °C/°F	441 °C/°F	470 °C/°F	510A/C °C/°F	510N °C/°F	8084 °C/°F
Hydrofluoric/Nitric Acid[1]	3 - 5/30 - 35	NR	NR	LS	NR	LS	NR
Hydrofluoric/Nitric/ Sulfuric Acid[1,2]	8/20/2			60/140		60/140	
Hydrofluosilicic Acid/ Polyaluminum Hydroxychloride (or Polyaluminum Chloride, PAC)[1,2]	1 - 22/1 - 35	40/100	40/100	40/100	40/100	40/100	40/100
Hydrofluosilicic Acid[1] (see Fluosilicic Acid)	0 - 10	80/180	80/180	80/180	80/180	80/180	65/150
Hydrofluosilicic Acid[1] (see Fluosilicic Acid)	11 - 35	40/100	40/100	40/100	40/100	40/100	40/100
Hydrofluosilicic Acid/ Zinc Chloride[1]	20/All	40/100	40/100	40/100	40/100	40/100	40/100
Hydrogen Bromide, Dry Gas	100	80/180	80/180	100/210	80/180	100/210	80/180
Hydrogen Bromide, Wet Gas	100	80/180	80/180	80/180	80/180	80/180	80/180
Hydrogen Chloride, Dry Gas[6,16]	100	100/210	175/350	175/350	100/210	175/350	80/180
Hydrogen Chloride, Wet Gas	100	100/210	110/230	110/230	100/210	110/230	80/180
Hydrogen Fluoride, Dry Gas/Vapor (if wet max. 40°C/100°F)[1,2,6]		80/180	80/180	80/180	80/180	80/180	80/180
Hydrogen Peroxide[2,3,6]	0 - 30	65/150	65/150	65/150	65/150	65/150	65/150
Hydrogen Peroxide[2,3,6]	35	25/80	30/90	40/100	30/90	40/100	NR
Hydrogen Peroxide[2,3,6]	50	NR	NR	LS	NR	NR	NR
Hydrogen Peroxide/ Caustic[1,2,3] (See individual listing for details)		85/185	85/185		85/185	85/185	80/180
Hydrogen Peroxide/Caustic Bleach - Aqueous Solution with up to 0.56 wt. % Hydrogen Peroxide, pH = 10.7, 2% Sodium Silicate Pentahydrate, 0.2% Chelating Agent, 0.2% Chelant[1,2,3]		85/185	85/185		85/185	85/185	80/180
Hydrogen Sulfide[6,16]	5	100/210	175/350	175/350	100/210	175/350	80/180
Hydrogen Sulfide, Aqueous	All	100/210	100/210	100/210	100/210	100/210	80/180
Hydrogen Sulfide, Dry Gas	100	100/210	110/230	110/230	100/210	110/230	80/180
Hydrosulfite Bleach, Aqueous Solution containing 5% Zinc Hydrosulfite and 2.5% Tripolyphosphate[5]		80/180	80/180	80/180	80/180	80/180	80/180

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Chemical Environment	Concentration %	DERAKANE or DERAKANE MOMENTUM Resin 411 °C/°F	441 °C/°F	470 °C/°F	510A/C °C/°F	510N °C/°F	8084 °C/°F
Hydroxyacetic Acid (Glycolic Acid)	20	40/100	50/120	65/150	40/100	50/120	40/100
Hydroxyacetic Acid (Glycolic Acid)	70	40/100	40/100	40/100	40/100	40/100	
Hydroxylamine Acid Sulfate (Hydroxylammonium Acid Sulfate, HSA), Reaction of Hydroxylamine Acid Disulfate with steam to form HAS, Sulfuric Acid, Ammonium Sulfate	> 0.5		100/210	100/210			
Hypochlorous Acid[2,3]	0 - 10	40/100	40/100	40/100	40/100	40/100	40/100
Hypophosphorous Acid	0 - 50	50/120	50/120	50/120	50/120	50/120	50/120
Imidazoline Acetate/Solvent[2,4]	20	40/100	45/110	50/120	40/100	45/110	NR
Imidazoline Acetate/Solvent[2,4]	60	NR	LS	40/100	NR	NR	NR
Incinerator Gases (see Flue Gas)							
Insecticide Emulsions	0.5 - 10	50/120	50/120	50/120	50/120	50/120	
Iodine, Crystals	100	65/150	65/150	65/150	65/150	65/150	65/150
Iodine, Vapor	100	65/150	65/150	80/180	65/150	65/150	65/150
Iron and Steel Cleaning Bath, 9% Hydrochloric, 23% Sulfuric acid	9	80/180	100/210	100/210	80/180	100/210	80/180
Iron Plating Solution 45% $FeCl_2$; 15% $CaCl_2$; 20% $FeSO_4$; 11% $(NH_4)_2SO_4$		80/180	120/250	120/250	80/180	120/250	80/180
Isoamyl Alcohol	20	65/150	65/150	80/180	65/150	65/150	65/150
Isoamyl Alcohol	100	50/120	60/140	65/150	50/120	60/140	50/120
Isobutyl Alcohol	20	65/150	65/150	80/180	65/150	65/150	40/100
Isobutyl Alcohol	100	50/120	50/120	65/150	50/120	50/120	NR
Isodecanol	100	50/120	65/150	80/180	50/120	65/150	50/120
Isononyl Alcohol	100	65/150	65/150	65/150	65/150	65/150	40/100
Isooctyl Adipate	100	50/120	50/120	65/150	50/120		40/100
Isooctyl Alcohol	100	65/150	65/150	65/150	65/150	65/150	50/120
Isopropanol Amine	100	50/120	50/120	50/120	50/120	50/120	NR
Isopropyl Alcohol (Isopropanol)	100	50/120	50/120	50/120	50/120	50/120	NR
Isopropyl Amine	0.5 - 50	40/100	40/100	40/100	40/100	40/100	
Isopropyl Amine	100	NR	NR	LS	NR	NR	NR
Isopropyl Myristate	100	100/210	110/230	110/230		110/230	65/150
Isopropyl Palmitate	100	100/210	110/230	110/230	100/210	110/230	65/150
Itaconic Acid	0.5 - 40	60/140	60/140	60/140	60/140	60/140	60/140
Jet Fuel, General	100	60/140	60/140	60/140	60/140	60/140	60/140
Kerosene	100	80/180	80/180	80/180	80/180	80/180	65/150

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For notes in English, see page 6; French, see page 14, German, see page 22; Spanish, see page 30.

Chemical Resistance Table: Maximum Service Temperatures for DERAKANE and DERAKANE MOMENTUM™ Resins—*continued*

Chemical Environment	Concentration %	DERAKANE or DERAKANE MOMENTUM Resin 411 °C/°F	441 °C/°F	470 °C/°F	510A/C °C/°F	510N °C/°F	8084 °C/°F
Kraft Recovery Boiler Breeching (see Flue Gas)							
Lactic Acid	All	100/210	100/210	100/210	100/210	100/210	65/150
Lasso* Herbicide[4]	All			50/120			
Latex (Emulsion in Water) (for specific latices see under chemical/polymer name)	All	50/120	50/120	50/120	50/120	50/120	50/120
Lauroyl Chloride	100	40/100	50/120	50/120		50/120	
Lauryl Alcohol	100	65/150	80/180	80/180	65/150	80/180	50/120
Lauryl Chloride	100	100/210	100/210	100/210	100/210	100/210	65/150
Lauryl Mercaptan	100	80/180	95/200	100/210	80/180	95/200	
Lead Acetate	Sat'd	100/210	110/230	110/230	100/210	110/230	
Levulinic Acid	Sat'd	100/210	110/230	110/230	100/210	110/230	
Lignin Sulfonate	All	80/180	80/180	80/180	80/180	80/180	65/150
Lime Slurry (see Calcium Hydroxide)							
Limestone Slurry (see Calcium Carbonate)	All	80/180	80/180	80/180	80/180	80/180	80/180
Linseed Oil	100	100/210	110/230	110/230	100/210	110/230	65/150
Liquid Petroleum Gas (LPG)	100	60/140	60/140	60/140	60/140	60/140	60/140
Lithium Bromide	Sat'd	100/210	120/250	120/250	100/210		80/180
Lithium Carbonate[1]	All	80/180	80/180	80/180	80/180	80/180	80/180
Lithium Chloride	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180
Lithium Chloride	Sat'd (35 - 40)	100/210	120/250	120/250	100/210	120/250	80/180
Lithium Hydroxide[1]	All	80/180	80/180	40/100	80/180	80/180	80/180
Lithium Hypochlorite[1,2,3,5]	All	80/180	80/180	40/100	80/180	80/180	80/180
Magnesium Bisulfite	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180
Magnesium Carbonate	All	80/180	80/180	80/180	80/180	80/180	80/180
Magnesium Chloride	Sat'd	100/210	120/250	120/250	100/210	120/250	80/180
Magnesium Fluosilicate[1]	All	80/180	80/180	80/180		80/180	80/180
Magnesium Hydroxide	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180
Magnesium Nitrate	All	100/210	100/210	100/210	100/210	100/210	80/180
Magnesium Phosphate	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180
Magnesium Sulfate	Sat'd	100/210	120/250	120/250	100/210	120/250	80/180
Magnesium Sulfate, Phosphoric Acid	1 - 40/0 - 36	100/210	100/210	100/210	100/210	100/210	100/210
Magnifloc** 500 Series Products	All	60/140	60/140	60/140	60/140	60/140	60/140
Magnifloc 837A Products	All	65/150	65/150	65/150	65/150	65/150	65/150
Maleic Acid	> 0.5	80/180	100/210	100/210	80/180	100/210	80/180
Manganese Chloride (Manganous Chloride)	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180
Manganese Nitrate (Manganous)	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180

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For notes in English, see page 6; French, see page 14, German, see page 22; Spanish, see page 30.

Chemical Environment	Concentration %	DERAKANE or DERAKANE MOMENTUM Resin 411 °C/°F	441 °C/°F	470 °C/°F	510A/C °C/°F	510N °C/°F	8084 °C/°F
Manganese Sulfate (Manganous Sulfate)	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180
Melamine Formaldehyde Resin	All	40/100	50/120	50/120	40/100	50/120	40/100
Mercaptoacetic Acid	All	NR	25/80	40/100	NR	25/80	NR
Mercaptoethanol	10		80/180	80/180		80/180	
Mercuric Chloride	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180
Mercurous Chloride	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180
Mercury	100	100/210	120/250	120/250	100/210	120/250	65/150
Metal Pickling Solutions (Sulfuric-, Hydrochloric-, and/or Phosphoric Acids)[9]	0.5 - 15 Total	100/210	100/210	100/210	100/210	100/210	
Methacrylic Acid[7]	25	40/100	40/100	50/120	40/100	40/100	40/100
Methacrylic Acid	100	LS	LS	40/100	LS	40/100	
Methane/Nitrogen	70/30	60/140	80/180	95/200	80/180	95/200	60/140
Methane Sulfonic Acid[6]	20 - 100	NR	LS	40/100	NR	NR	NR
Methanol (Methyl Alcohol)	5	50/120	50/120	50/120	50/120	50/120	50/120
Methanol (Methyl Alcohol)	20	NR	30/90	40/100	NR	40/100	NR
Methanol (Methyl Alcohol)	40 - 100	NR	LS	40/100	NR	NR	NR
Methanol, Fumes, no condensation or coalescence	Fumes		65/150	80/180	80/180	80/180	
Methanol/Ethanolamine	0 - 60/0 - 20	NR	LS	40/100	NR	NR	NR
Methanol/Formaldehyde/Sulfuric	60/20/2	NR	LS	40/100	NR	NR	NR
Methanol/Formaldehyde	0 - 15/0 - 37	50/120	65/150	65/150	50/120	65/150	
Methanol/Formaldehyde	35/4	NR	NR	40/100	NR	NR	
1-Methoxy-2-Propanol	100	NR	LS	20/70	NR	NR	NR
Methyl Acetate	20	40/100	40/100	40/100	40/100	40/100	40/100
Methyl Acetate	100	NR	NR	LS	NR	LS	NR
Methyl Bromide	10	25/80	25/80	25/80	25/80	25/80	NR
Methyl Bromide	100	NR	NR	LS	NR	NR	NR
Methyl Butyl Ketone (MBK), includes Methyl t-Butyl Ketone (MTBK) and other Isomers	100	25/80	40/100	50/120	25/80	40/100	NR
Methyl Chloride, Gas	All	40/100	65/150	65/150	40/100	65/150	NR
Methyl Chloride, Fumes, no condensation or coalescence	Fumes			80/180	80/180	80/180	
Methyl Distearyl Ammonium Chloride/Isopropanol	75/25	50/120	50/120	50/120	50/120	50/120	
Methyl Ethyl Ketone	20	40/100	40/100	40/100	40/100	40/100	40/100
Methyl Ethyl Ketone	100	LS	LS	20/70	LS	LS	NR
Methyl Ethyl Ketone, 2-Butanol, Triethylamine, 2-Butoxy Ethanol	< 25 Total	LS	25/80	40/100	LS	25/80	NR
Methyl Formate	5	40/100	45/110	50/120	45/110	50/120	
Methyl Isobutyl Ketone (MIBK)	100	25/80	40/100	50/120	25/80	40/100	NR
Methyl Mercaptan (Gas)	All	40/100	65/150	65/150	40/100	65/150	NR

For notes in English, see page 6; French, see page 14, German, see page 22; Spanish, see page 30.

Chemical Resistance Table: Maximum Service Temperatures for DERAKANE and DERAKANE MOMENTUM™ Resins—*continued*

Chemical Environment	Concentration %	DERAKANE or DERAKANE MOMENTUM Resin 411 °C/°F	441 °C/°F	470 °C/°F	510A/C °C/°F	510N °C/°F	8084 °C/°F
Methyl Methacrylate	All	NR	LS	25/80	NR	20/70	NR
N-methyl-2-pyrrolidone	10			LS			
N-methyl-2-pyrrolidone	100	NR	NR	LS	NR	NR	NR
Methyl t-Butyl Ether	100	NR	25/80	25/80	NR	25/80	NR
Methyl t-Butyl Ether (MTBE)/ Fuel C (Fuel C is 50% toluene and 50% isooctane)	15/85	40/100	50/120	50/120	40/100	50/120	NR
Methyl t-Butyl Ether, Fumes, no condensation or coalescence	Fumes			80/180	80/180	80/180	
2-Methyl-3-butenenitrile	All	25/80	40/100	40/100	25/80	40/100	
Methylamine	20	40/100	40/100	40/100	40/100	40/100	40/100
Methylamine	40	LS	LS	LS	LS	LS	NR
Methylamine	100	NR	NR	LS	NR	NR	NR
Methyldiethanolamine	20	50/120	65/150	80/180	50/120	65/150	40/100
Methyldiethanolamine	100	50/120	50/120	65/150	50/120	50/120	
Methylene Chloride	100	NR	NR	LS	NR	NR	NR
Methylene Chloride, Fumes, no condensation or coalescence	Fumes			80/180	80/180	80/180	
Methylene Chloride/Methanol/ Water	1/4/95	40/100	40/100	50/120	40/100	40/100	40/100
Methylstyrene (alpha)	100	25/80	40/100	50/120	25/80	40/100	NR
Mineral Oils, Aliphatic	100	100/210	120/250	120/250	100/210	120/250	65/150
Molasses	100	80/180	80/180				
Monochloroacetic Acid (see Chloroacetic Acid)							
Monochlorobenzene	100	NR	25/80	40/100	NR	25/80	NR
Monoethanolamine (see Ethanolamine)							
Monomethylhydrazine	100	NR	NR	LS	NR	NR	NR
Morpholine[2]	20	40/100	45/110	50/120	45/110	50/120	40/100
Morpholine[2]	100	NR	NR	25/80	NR	NR	NR
Morpholine/Cyclohexylamine	All	NR	NR	25/80	NR	NR	NR
Motor Oil	100	100/210	120/250	120/250	100/210	120/250	65/150
Muriatic Acid (see Hydrochloric Acid)							
Myristic Acid	100	100/210	120/250	120/250	100/210	120/250	65/150
Naphtha	100	80/180	100/210	100/210	80/180	100/210	80/180
Naphtha, Heavy Aromatic	100		50/120	50/120		50/120	

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Chemical Environment	Concentration %	DERAKANE or DERAKANE MOMENTUM Resin 411 °C/°F	441 °C/°F	470 °C/°F	510A/C °C/°F	510N °C/°F	8084 °C/°F
Naphthalene	100	100/210	100/210	100/210	100/210	100/210	80/180
Neutralizer & Desmut	All	65/150	65/150	65/150	65/150	65/150	65/150
Nickel Chloride	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180
Nickel Nitrate	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180
Nickel Plating Solution #1 (11% Nickel Sulfate/ 2% Nickel Chloride/ 1% Boric Acid)		80/180	80/180	80/180	80/180	80/180	80/180
Nickel Plating Solution #2 (44% Nickel Sulfate/ 4% Ammonium Chloride/ 4% Boric Acid)		80/180	80/180	80/180	80/180	80/180	80/180
Nickel Plating Solution #3 (15% Nickel Sulfate/5% Nickel Chloride/3% Boric Acid)		100/210	100/210	100/210	100/210	100/210	80/180
Nickel Sulfamate	All	80/180	80/180	80/180	80/180	80/180	80/180
Nickel Sulfate	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180
Nitric Acid	0 - 5	65/150	80/180	80/180	65/150	80/180	65/150
Nitric Acid	6 - 10	65/150	65/150	65/150	65/150	65/150	50/120
Nitric Acid	11 - 20	50/120	50/120	65/150	50/120	65/150	50/120
Nitric Acid[2]	21 - 29	40/100	40/100	50/120	40/100	50/120	40/100
Nitric Acid[2]	30 - 35	25/80	30/90	40/100	30/90	40/100	NR
Nitric Acid[2]	36 - 40	NR	NR	40/100	NR	25/80	NR
Nitric Acid	70	NR	NR	LS	NR	NR	NR
Nitric Acid Fumes[2]	< 60 (soln.)	80/180	80/180	80/180	80/180	80/180	80/180
Nitric Acid Fumes, no condensation[2]	> 60 (soln.)	80/180	80/180	80/180	80/180	80/180	80/180
Nitric Acid/Hexavalent Chrome (Chromic Acid)	10/5	40/100	50/120	65/150	40/100	40/100	40/100
Nitric Acid/Hydrogen Peroxide/ Hydrofluoric Acid[1,2,3]	30/5/0.5	25/80	30/90	40/100	30/90	40/100	NR
Nitric/Hydrofluoric Acid[1,2]	25/3	40/100	40/100	50/120	40/100	50/120	40/100
Nitric/Hydrofluoric Acid	30 - 35/3 - 5	NR	NR	LS	NR	LS	NR
Nitric/Hydrofluoric Acid[1,2]	15/15			40/100		40/100	
Nitric/Hydrofluoric Acid[1,2]	20/6	50/120	50/120	60/140	55/130	60/140	40/100
Nitric/Hydrofluoric/ Sulfuric Acid[1,2]	20/8/2			60/140		60/140	
Nitric/Phosphoric Acid[2]	24/23	40/100	40/100	50/120	40/100	50/120	40/100
Nitric/Sulfuric Acid[2]	20/20	40/100	40/100	50/120	40/100	50/120	40/100
Nitric/Sulfuric/Phosphoric Acid	20/5/2	40/100	40/100	50/120	40/100	50/120	40/100
Nitric/Phosphoric Acid[2]	5 & 5	65/150	80/180	80/180	80/180	80/180	65/150
Nitrobenzene	100	NR	25/80	40/100	NR	25/80	NR

For notes in English, see page 6; French, see page 14, German, see page 22; Spanish, see page 30.

Chemical Resistance Table: Maximum Service Temperatures for DERAKANE and DERAKANE MOMENTUM™ Resins—*continued*

Chemical Environment	Concentration %	DERAKANE or DERAKANE MOMENTUM Resin 411 °C/°F	441 °C/°F	470 °C/°F	510A/C °C/°F	510N °C/°F	8084 °C/°F
Nitrophenol[11]	[11]	NR	25/80	40/100	NR	25/80	NR
N-methyl-2-pyrrolidone	10			LS			
N-methyl-2-pyrrolidone	100	NR	NR	LS	NR	NR	NR
Noncondensable Blow Down Gases (see Flue Gas or Blow Down)							
Octanoic Acid	100	80/180	100/210	100/210	80/180	100/210	
Oil, Sweet and Sour, Crude	100	100/210	120/250	120/250	100/210	120/250	65/150
Oleic Acid	100	100/210	100/210				
Oleum (Fuming Sulfuric)		NR	NR	LS	NR	NR	NR
Olive Oils	100	100/210	120/250				
Ortho-Dichlorobenzene (see Dichlorobenzene)							
Oxalic Acid	Sat'd	50/120	50/120	50/120	50/120	50/120	
Ozone in solution[6]	2 mg/L	40/100	40/100	40/100	40/100	40/100	40/100
Palladium Suspensions in Ammonium Hydroxide, (see Ammonium Hydroxide)							
Palladium Suspensions in Hydrochloric Acid (see Hydrochloric Acid)							
Palmitic Acid	100	100/210	120/250				
Paper Mill Effluent (see Sulfite/ Sulfate Liquors (Pulp Mill))							
Para-Dichlorobenzene (see Dichlorobenzene)							
Peanut Oil	100	80/180	80/180				
Pentabromo Diphenyl Oxide	100	25/80	45/110	50/120	25/80	50/120	NR
Pentachlorophenol[4]	All	50/120	50/120	50/120	50/120	50/120	50/120
Pentanedioic Acid (see Glutaric Acid)							
Peracetic Acid[1,2,3,6]	20	40/100	40/100	40/100	40/100	40/100	
Peracetic Acid	35	NR	NR	LS	NR	NR	NR
Perchloric Acid	10	65/150	65/150	65/150	65/150	65/150	65/150
Perchloric Acid	30	40/100	40/100	40/100	40/100	40/100	40/100
Perchloroethylene	100	25/80	50/120	50/120	25/80	50/120	NR
Phenol (Carbolic Acid)[2]	0 - 2	25/80	40/100	50/120	25/80	40/100	NR
Phenol (Carbolic Acid)[2]	5	NR	25/80	50/120	NR	25/80	NR
Phenol (Carbolic Acid)[2]	10	NR	LS	50/120	NR	LS	NR
Phenol (Carbolic Acid)[2]	15	NR	LS	30/90	NR	LS	NR
Phenol (Carbolic Acid)[2]	88	NR	NR	20/70	NR	NR	NR
Phenol Formaldehyde Resin	All	40/100	50/120	50/120	40/100	50/120	40/100
Phenol Sulfonic Acid[6]	All	25/80	25/80	25/80	25/80	25/80	
Phenol/Methanol/ Anionic Detergent	15/10/20	NR	NR	LS	NR	NR	NR
Phenolic Resin/Phenol[2]	80/20			25/80			

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Chemical Environment	Concentration %	DERAKANE or DERAKANE MOMENTUM Resin 411 °C/°F	441 °C/°F	470 °C/°F	510A/C °C/°F	510N °C/°F	8084 °C/°F
Phenolic Resin/Phenol[2]	90/10			50/120			
Phosphoric Acid	0.5 - 85	100/210	100/210	100/210	100/210	100/210	80/180
Phosphoric Acid	85 - 100	100/210	100/210	105/220	100/210	100/210	80/180
Phosphoric Acid (Polyphosphoric Acid)	115	100/210	100/210	105/220	100/210	100/210	80/180
Phosphoric Acid (Superphosphoric Acid 76% P_2O_5)	105	100/210	100/210	105/220	100/210	100/210	80/180
Phosphoric Acid/Tributyl Phosphate (Vapor Phase, Condensation)	85/0.5	50/120	60/140	60/140	50/120	60/140	40/100
Phosphoric Acid with Phosphorous Pentoxide, Hydrochloric Acid and Sulfuric Dioxide	Fumes	100/210	110/230	110/230	100/210	110/230	80/180
Phosphoric Acid, Vapor[6]	All	100/210	120/250	120/250	100/210	120/250	80/180
Phosphoric Acid/Gypsum	61/39	100/210	100/210	100/210	100/210	100/210	80/180
Phosphoric Acid/Sulfuric Acid	85/15	40/100	40/100	50/120	40/100	40/100	40/100
Phosphoric Acid/Tributyl Phosphate/Hydrofluoric Acid (no condensation of TBP)	88/0.1/0.03	80/180	80/180	100/210	80/180	80/180	
Phosphoric Acid/Zinc Chloride	0 - 100/0.5 - 70	100/210	100/210	100/210	100/210	100/210	80/180
Phosphoric Acid/Hydrochloric Acid, sat'd with Cl_2[9,12]	15/9	100/210	100/210	100/210	100/210	100/210	
Phosphoric/Sulfuric Acid	0 - 45/0.5 - 40	100/210	100/210	100/210	100/210	100/210	80/180
Phosphoric/Sulfuric/ Hydrofluoric[1,2]	0 - 75/1/0 - 3	65/150	65/150	65/150	65/150	65/150	65/150
Phosphorous Acid	70	80/180	80/180	80/180	80/180	80/180	80/180
Phosphorous Acid 70%/ Hydrochloric Acid 37%[9,15]	0 - 100/1 - 10	100/210	100/210	100/210	100/210	100/210	80/180
Phosphorous Acid 70%/ Hydrochloric Acid 37%[8,9,15]	0 - 100/11 - 20	65/150	65/150	80/180	65/150	65/150	
Phosphorus Oxychloride	100	NR	NR	LS	NR	NR	NR
Phosphorus Trichloride	100	NR	NR	LS	NR	NR	NR
Phthalic Acid[4]	All	100/210	100/210	100/210	100/210	100/210	
Picric Acid (Alcoholic)[4]	10	NR	LS	40/100	NR	NR	NR
Pine Oil	100	90/190	90/190	90/190	90/190	90/190	
Plating Chemicals[6]							
Polyacrylamide	All	80/180	80/180	80/180	80/180	80/180	80/180
Polyacrylic Acid	All	80/180	80/180	80/180	80/180	80/180	80/180
Polyethylene Glycol methyl ether[6]	100						
Polyethyleneimine	All	80/180	80/180	80/180	80/180	80/180	
Polyphosphoric Acid H_3PO_4	115%	100/210	100/210	105/220	100/210	100/210	80/180
Polyvinyl Acetate Adhesives	All	50/120	50/120	50/120	50/120	50/120	

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Chemical Resistance Table: Maximum Service Temperatures for DERAKANE and DERAKANE MOMENTUM™ Resins—*continued*

Chemical Environment	Concentration %	DERAKANE or DERAKANE MOMENTUM Resin 411 °C/°F	441 °C/°F	470 °C/°F	510A/C °C/°F	510N °C/°F	8084 °C/°F
Polyvinyl Alcohol	100	80/180	80/180	80/180	80/180	80/180	
Polyvinyl Chloride Latex with 35 parts Dioctylphthalate	All	50/120	50/120	50/120	50/120	50/120	
Potassium Aluminum Sulfate	Sat'd	100/210	120/250	120/250	100/210	120/250	80/180
Potassium Bicarbonate	> 0.5	80/180	80/180	80/180	80/180	80/180	80/180
Potassium Bromide	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180
Potassium Carbonate[1]	0 - 50	80/180	80/180	65/150	80/180	65/150	80/180
Potassium Carbonate/Boric Acid/ Potassium Metavanadate[1]	20/4/1	80/180	80/180	65/150	80/180	65/150	80/180
Potassium Chloride	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180
Potassium Dichromate	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180
Potassium Ferricyanide	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180
Potassium Ferrocyanide	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180
Potassium Fluoride	All	80/180	80/180	80/180	80/180	80/180	80/180
Potassium Gold Cyanide	12	100/210	100/210	100/210	100/210	100/210	80/180
Potassium Hydroxide[1,2]	0 - 45	65/150	40/100	25/80	65/150	25/80	
Potassium Hydroxide/Potassium Cyanide/Copper Cyanide[1]	2/3/8 oz/gal, 2/2.5/7%	65/150	40/100	25/80	65/150	25/80	
Potassium Hypochlorite, Potassium Hydroxide, Potassium Metasilicate[1,2,3]	50/40/10	50/120					
Potassium Iodide	All	65/150	65/150	65/150	65/150	65/150	65/150
Potassium Nitrate	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180
Potassium Oxalate	All	65/150	65/150	65/150	65/150	65/150	65/150
Potassium Permanganate	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180
Potassium Persulfate	All	100/210	100/210	100/210	100/210	100/210	80/180
Potassium Pyrophosphate	60	55/130	65/150	65/150	55/130	65/150	55/130
Potassium Silicofluoride[1]	All	40/100	40/100	40/100	40/100	40/100	40/100
Potassium Sulfate	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180
Propane	100	60/140	60/140	60/140	60/140	60/140	60/140
Propanol (n-)	100	50/120	50/120	50/120	50/120	50/120	NR
Propanol (n-), Fumes, no condensation or coalescence	Fumes	80/180	80/180	80/180	80/180	80/180	80/180
Propionic Acid	0 - 50	80/180	80/180	80/180	80/180	80/180	80/180
Propionic Acid	100	NR	25/80	40/100	NR	25/80	NR
Propionyl Chloride	100	NR	NR	LS	NR	NR	NR
Propyl Acetate	100	NR	LS	25/80	NR	NR	NR
Propyl Bromide	100	NR	LS	25/80	NR	LS	NR
Propyl Chloride	100	NR	LS	25/80	NR	LS	NR
Propylene Glycol	100	100/210	100/210	100/210	100/210	100/210	
Propylene Glycol Monomethyl Ether Acetate (DOWANOL PMA)[2]	20	40/100	50/120	50/120	40/100	50/120	40/100

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Chemical Environment	Concentration %	DERAKANE or DERAKANE MOMENTUM Resin 411 °C/°F	441 °C/°F	470 °C/°F	510A/C °C/°F	510N °C/°F	8084 °C/°F
Propylene Glycol Monomethyl Ether Acetate (DOWANOL PMA)[2]	100	NR	LS	20/70	NR	NR	NR
Propylene Glycol Monomethyl Ether (see DOWANOL PM)							
Propylene Glycol/ Ethoxylated Fatty Alcohols/ Diethylene Glycol Monobutyl Ether (DOWANOL DB)	60/20/20	40/100	45/110	50/120	40/100	50/120	NR
Propylene Glycol/ Monoethanolamine	0 - 99/1	25/80	30/90	40/100	25/80	30/90	NR
Propylene Oxide	100	NR	NR	NR	NR	NR	NR
Propylene Oxide, Fumes, no condensation or coalescence	Fumes			80/180	80/180	80/180	
Pulp Paper Mill Blow Down (Noncondensable Gases, see also Blow Down)							
Pyridine	20	40/100	40/100	40/100	40/100	40/100	NR
Pyridine	100	NR	NR	LS	NR	NR	NR
Quaternary Amine Salts	> 0.5	80/180	80/180	80/180	80/180	80/180	
Quinoline	20	40/100	40/100	40/100	40/100	40/100	
Quinoline	100			LS			
Radiation Resistance[6]							
Rayon Spin Bath				60/140			
Rayon Spinning	Fumes	60/140	60/140	60/140	60/140	60/140	
Recovery Boiler Gases (see Flue Gas)							
Red Liquor	All	80/180	80/180	80/180	80/180	80/180	65/150
Salicylic Acid	All	70/160	70/160				
Salt Brine	Sat'd	100/210	120/250	120/250	100/210	120/250	80/180
Scrubbing Low MW Amines with 10% Sulfuric Acid, (see Amine Salts)							
Sea Water		100/210	100/210	100/210	100/210	100/210	80/180
Selenious Acid	All	100/210	100/210	100/210	100/210	100/210	80/180
Silicon Tetrafluoride/Hydrofluoric/ Sulfuric Acid[1,2]	< 10 Total	50/120	50/120	50/120	50/120	50/120	50/120
Silver Nitrate	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180
Silver Plating Solution, 4% Silver; 7% Potassium and 5% Sodium Cyanides; 2% Potassium Carbonate[1]		80/180	80/180	65/150	80/180	65/150	
Sodium Acetate	> 0.5	100/210	100/210	100/210	100/210	100/210	
Sodium Alkyd Aryl Sulfonates	All	80/180	80/180	80/180	80/180	80/180	65/150
Sodium Aluminate[1]	All	70/160	70/160	50/120	70/160	50/120	50/120
Sodium Benzoate	All	80/180	80/180	80/180	80/180	80/180	80/180
Sodium Bicarbonate	All	80/180	80/180	80/180	80/180	80/180	80/180

For notes in English, see page 6; French, see page 14, German, see page 22; Spanish, see page 30.

Chemical Resistance Table: Maximum Service Temperatures for DERAKANE and DERAKANE MOMENTUM™ Resins—*continued*

Chemical Environment	Concentration %	DERAKANE or DERAKANE MOMENTUM Resin 411 °C/°F	441 °C/°F	470 °C/°F	510A/C °C/°F	510N °C/°F	8084 °C/°F
Sodium Bicarbonate/ Sodium Carbonate[1]	15/20	80/180	80/180	65/150	80/180	65/150	80/180
Sodium Bifluoride[1]	All	50/120	50/120	50/120	50/120	50/120	50/120
Sodium Bisulfate	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180
Sodium Bisulfide (Hydrosulfide)	All	80/180	80/180	80/180	80/180	80/180	80/180
Sodium Bisulfite	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180
Sodium Borate	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180
Sodium Borohydride SWS (Stabilized Water Solution)	All	40/100	40/100				
Sodium Bromate	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180
Sodium Bromide	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180
Sodium Carbonate[1]	All	80/180	80/180	65/150	80/180	65/150	80/180
Sodium Carbonate/ Sodium Bicarbonate[1]	20/15	80/180	80/180	65/150	80/180	65/150	80/180
Sodium Chlorate, Stable	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180
Sodium Chlorate/ Phosphoric Acid[6]	1 - 20/1 - 20						
Sodium Chlorate/ Sulfuric Acid[6]	1 - 20/1 - 20						
Sodium Chlorate/Sodium Chloride	34/20	100/210	100/210	100/210	100/210	100/210	80/180
Sodium Chloride	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180
Sodium Chloride (see Salt Brine)	Sat'd	100/210	120/250	120/250	100/210	120/250	80/180
Sodium Chloride with Chlorine, pH > 9 (see Chlorinated Brine)							
Sodium Chloride with Chlorine, pH 2.5 - 9[6]		LS	LS	LS	LS	LS	LS
Sodium Chloride, pH < 2.5, Cl2 Sat'd (see Chlorinated Brine)							
Sodium Chloride/Ethyl Vanillin	0.1 - 25/1	50/120	50/120				
Sodium Chloride/ Magnesium Oxide/Lime	0.5 - 26/0.1 - 20/ 0.1 - 10	100/210	100/210	100/210	100/210	100/210	80/180
Sodium Chloride/Sodium Hydroxide[1,2]	0.5 - 10/0.1 - 2	80/180	65/150	40/100	80/180	65/150	50/120
Sodium Chloride/Sodium Chlorate	20/34	100/210	100/210	100/210	100/210	100/210	
Sodium Chlorite, pH < 6, (see Chlorine Dioxide)							
Sodium Chlorite, pH > 6[5]	All	80/180	80/180	80/180	80/180	80/180	80/180
Sodium Chlorite/Sodium Hypochlorite pH>11[1,2,3]	0.1 - 25/0.1 - 15	40/100	40/100	40/100	40/100	40/100	40/100
Sodium Chromate	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180
Sodium Cyanide	> 0.5	100/210	100/210	100/210	100/210	100/210	
Sodium Dichromate	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180

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Chemical Environment	Concentration %	DERAKANE or DERAKANE MOMENTUM Resin 411 °C/°F	441 °C/°F	470 °C/°F	510A/C °C/°F	510N °C/°F	8084 °C/°F
Sodium Dimethyldithiocarbamate/ Disodium Ethylene Bisdithiocarbamate	0.1 - 15/0.1 - 15	40/100	40/100	50/120	40/100	50/120	40/100
Sodium Diphosphate	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180
Sodium Dodecylbenzene Sulfonate	All	70/160	70/160	70/160	70/160	70/160	
Sodium Ferricyanide	> 0.5	100/210	100/210	100/210	100/210	100/210	
Sodium Ferrocyanide	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180
Sodium Fluoride	All	80/180	80/180	80/180	80/180	80/180	80/180
Sodium Fluoroborate[1]	> 0.5	95/200	95/200	95/200			
Sodium Fluorosilicate[1]	All	50/120	50/120	50/120	50/120	50/120	50/120
Sodium Gluconate	> 0.5	80/180	95/200	100/210	95/200	100/210	65/150
Sodium Glycolate	> 0.5	80/180	95/20	100/210	80/180	95/200	65/150
Sodium Hexametaphosphate	All	80/180	80/180	80/180	80/180	80/180	80/180
Sodium Hydrosulfide (Sodium Bisulfide)	All	80/180	80/180	80/180	80/180	80/180	80/180
Sodium Hydroxide[1,2]	All	80/180	65/150	40/100	80/180	65/150	65/150
Sodium Hydroxide/ Sodium Bisulfite[1,2]	All	80/180	65/150	40/100	80/180	65/150	65/150
Sodium Hydroxide/Sodium Chloride/Sodium Sulfate/ Sodium Hypochlorite (active Chlorine)[1,2,3,5]	1 - 20/1 - 15/ 1 - 8/0 - 15	80/180	65/150	40/100	80/180	65/150	
Sodium Hydroxide/Organics (within solubility limits, i.e., no phase separation or coalescence)	8/trace	80/180	65/150				
Sodium Hydroxide/Sodium Hypochlorite[1,2]	0 - 20/0 - 0.1	80/180					
Sodium Hypochlorite, pH>11 (active Chlorine)[1,2,3,5]	0 - 18	80/180	80/180	50/120	80/180	65/150	65/150
Sodium Hypochlorite, pH>11 (active Chlorine)[1,2,3,5]	21		40/100		40/100		
Sodium Hypochlorite, pH>11 (active Chlorine)[1,2,3,5]	24	LS	LS	LS	LS	LS	NR
Sodium Lauryl Sulfate	All	70/160	70/160	70/160	70/160	70/160	
Sodium Metabisulfite	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180
Sodium Methyldithiocarbamate	All	80/180	80/180	80/180	80/180	80/180	
Sodium Monophosphate	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180
Sodium Myristyl Sulfate	All	70/160	70/160	70/160	70/160	70/160	
Sodium Nitrate	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180
Sodium Nitrite	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180
Sodium Oxalate	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180
Sodium Perchlorate	60	40/100	40/100	40/100	40/100	40/100	40/100
Sodium Persulfate	All	100/210	100/210	100/210	100/210	100/210	80/180

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Chemical Resistance Table: Maximum Service Temperatures for DERAKANE and DERAKANE MOMENTUM™ Resins—*continued*

Chemical Environment	Concentration %	DERAKANE or DERAKANE MOMENTUM Resin 411 °C/°F	441 °C/°F	470 °C/°F	510A/C °C/°F	510N °C/°F	8084 °C/°F
Sodium Phosphate, mono-, di-, tribasic	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180
Sodium Polyacrylate, pH 9 - 10.5	All	80/180	80/180	80/180	80/180	80/180	
Sodium Sarcosinate	40	50/120	50/120	50/120	50/120	50/120	
Sodium Silicate	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180
Sodium Sulfate	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180
Sodium Sulfate/Sodium Sulfite	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180
Sodium Sulfhydrate (see Sodium Hydrosulfide)							
Sodium Sulfide	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180
Sodium Sulfite	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180
Sodium Sulphite/Sodium Hydroxide/Toluene	22/10/5	25/80	40/100	40/100	25/80	40/100	NR
Sodium Tartrate	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180
Sodium Tetraborate	All	80/180	80/180	80/180	80/180	80/180	80/180
Sodium Thiocyanate	All	80/180	80/180	80/180	80/180	80/180	80/180
Sodium Thiosulfate	All	80/180	80/180	80/180	80/180	80/180	80/180
Sodium Tripolyphosphate	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180
Sodium Xylene Sulfonate	All	70/160	70/160	70/160	70/160	70/160	
Solder Plate (see Plating Chemicals)							
Solvent Extraction Solutions: 3% Isodecanol, 6% Alamine* 336, 91% Kerosene		80/180	80/180	80/180	80/180	80/180	65/150
Solvent Extraction Solutions: 4% Trioctylphosphine Oxide (TOPO), 4% Di 2-Ethylhexyl Phosphoric Acid (DEHPA), 92% Kerosene		80/180	80/180	80/180	80/180	80/180	
Sorbitol Solutions	All	70/160	70/160	80/180	70/160	70/160	
Sour Crude Oil (see Crude Oil)							
Soy (Soya) Sauce		70/160	70/160				
Soya Oil	100	100/210	100/210	100/210	100/210	100/210	65/150
Spearmint Oil	100	40/100	40/100				
Stannic Chloride	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180
Stannous Chloride	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180
Steam, Dry, No Condensation		100/210	105/220	105/220	100/210	105/220	80/180
Steam, Wet, Condensation		80/180	80/180	80/180	80/180	80/180	80/180
Stearic Acid	All	100/210	100/210	100/210	100/210	100/210	65/150
Styrene	100	NR	40/100	50/120	NR	40/100	NR
Styrene Acrylic Emulsion	All	50/120	50/120	50/120	50/120	50/120	
Styrene-Butadiene Latex	All	60/140	60/140	60/140	60/140	60/140	60/140
Succinonitrile, Aqueous	All	25/80	40/100	40/100	25/80	40/100	NR
Sugar/Sucrose	All	100/210	100/210				
Sugar Beet, Liquor	All	80/180	80/180				

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Chemical Environment	Concentration %	DERAKANE or DERAKANE MOMENTUM Resin 411 °C/°F	441 °C/°F	470 °C/°F	510A/C °C/°F	510N °C/°F	8084 °C/°F
Sugar Cane, Liquor & Sweetwater	All	80/180	80/180				
Sulfamic Acid	0.5 - 10	100/210	100/210	100/210	100/210	100/210	80/180
Sulfamic Acid	11 - 15	80/180	80/180	80/180	80/180	80/180	65/150
Sulfamic Acid	16 - 25	65/150	65/150	65/150	65/150	65/150	65/150
Sulfamic/Boric/ Glycolic Acid	0.5 - 25/0.5 - 30/ 0.5 - 10	65/150	65/150	65/150	65/150	65/150	
Sulfanilic Acid (meta)	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180
Sulfanilic Acid (para)[4]	All	100/210	100/210	100/210	100/210	100/210	80/180
Sulfate Process Noncondensable Gases (see Flue Gas)							
Sulfated Detergents (see Sulfonated Detergents)							
Sulfated Tall Oil Fatty Acid (see Tall Oil)	1 - 70						
Sulfides Scrubbing with Caustic (see Sodium Hydroxide)							
Sulfite/Sulfate Liquors (Pulp Mill)		95/200	95/200	95/200	95/200	95/200	80/180
Sulfonated Detergents	100	70/160	80/180	80/180	70/160	80/180	70/160
Sulfur Chloride	Fumes	95/200	95/200	95/200	95/200	95/200	80/180
Sulfur Chloride	100	NR	NR	LS	NR	NR	NR
Sulfur Dioxide (see Flue Gas)							
Sulfur Trioxide, Dry[16]	Fumes	100/210	100/210	150/300	100/210	100/210	80/180
Sulfur Trioxide, Wet (see Sulfuric Acid)							
Sulfur, Molten (Dry)[16]	100		120/250	150/300		120/250	
Sulfur, Wettable, Fungicide[4]	All	80/180	80/180	80/180	80/180	80/180	80/180
Sulfuric/Nitric/ Phosphoric Acids	0 - 13/ 0 - 11/0 - 30	65/150	65/150	65/150	65/150	65/150	
Sulfuric Acid	0.5 - 25	100/210	105/220	105/220	100/210	105/220	80/180
Sulfuric Acid	26 - 50	100/210	100/210	100/210	100/210	100/210	80/180
Sulfuric Acid	51 - 70	80/180	80/180	80/180	80/180	80/180	80/180
Sulfuric Acid[15]	71 - 75	40/100	50/120	80/180	40/100	50/120	40/100
Sulfuric Acid[2,15]	76 - 80	40/100	40/100	50/120	40/100	40/100	
Sulfuric Acid[15]	> 80	NR	NR	LS	NR	LS	NR
Sulfuric Acid/ Ammonium Bifluoride[1]	0 - 75/0.1 - 3	40/100	50/120	65/150	40/100	50/120	
Sulfuric Acid/Copper Sulfate	0 - 25/1 - 35	100/210	100/210	100/210	100/210	100/210	
Sulfuric Acid/Copper Sulfate/ Sodium Persulfate/EDTA	13/12/1/1	55/130	55/130	55/130	55/130	55/130	55/130

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Chemical Resistance Table: Maximum Service Temperatures for DERAKANE and DERAKANE MOMENTUM™ Resins—*continued*

Chemical Environment	Concentration %	DERAKANE or DERAKANE MOMENTUM Resin 411 °C/°F	441 °C/°F	470 °C/°F	510A/C °C/°F	510N °C/°F	8084 °C/°F
Sulfuric Acid/Hydriodic Acid	60/20	40/100	40/100	50/120	40/100	40/100	
Sulfuric Acid/ Hydrofluoric Acid[1,2]	25/10	40/100	45/110	50/120	40/100	40/100	
Sulfuric Acid/ Hydrofluoric Acid[1,2]	10/10	40/100	50/120	65/150	40/100	40/100	
Sulfuric Acid/ Hydrogen Peroxide[3]	1 - 20/1 - 10	65/150	65/150	65/150	65/150	65/150	
Sulfuric Acid/Hydrogen Peroxide/ Ammonium Sulfate/ Copper Sulfate[3]	10/5/5/5	40/100	40/100	40/100	40/100	40/100	
Sulfuric Acid/Hydrogen Sulfide	1 - 50/0 - 10	100/210	100/210	100/210	100/210	100/210	80/180
Sulfuric Acid/Methanol	30/5		40/100	50/120			
Sulfuric Acid/Nitric Acid	20/5	65/150	80/180	80/180	65/150	80/180	65/150
Sulfuric Acid/Phosphoric Acid	0 - 25/0 - 25	80/180	80/180	80/180	80/180	80/180	80/180
Sulfuric Acid/Sodium Chromate[6]							
Sulfuric Acid/Sodium Dichromate, (see Sulfuric Acid/ Chromic Acid Mixture)							
Sulfuric Acid/ Hydrochloric Acid[8,9,13]	50/15	40/100	45/110	50/125	40/100	50/120	
Sulfuric Acid/ Hydrochloric Acid[9,12]	1 - 25/1 - 10	80/180	100/210	100/210	100/210	100/210	80/180
Sulfuric Acid/ Hydrofluoric Acid[1,2]	1 - 20/3 - 6	55/130	55/130	60/140	55/130	60/140	40/100
Sulfuric Acid/Hydrofluoric Acid	30 - 35/3 - 5	LS	LS	LS	LS	LS	LS
Sulfuric Acid/Inorganic Salts	0.5 - 20/0.5 - 50	100/210	100/210	100/210	100/210	100/210	80/180
Sulfuric Acid/Inorganic Salts	21 - 50/0.5 - 20	80/180	80/180	80/180	80/180	80/180	80/180
Sulfuric Acid/Sulfate Salts, Max. Total Concentration 80%, (see Sulfuric Acid)							
Sulfuric Acid/Chromic Acid Mixture (Maximum Total Concentration 10%)		50/120	65/150	65/150	50/120	65/150	50/120
Sulfuric/Hydrochloric/ Hydrofluoric/Phosphoric Acids/ Chlorinated Solvents	40/20/5/35/1	NR	NR	LS	NR	LS	NR
Sulfuric/Hydrofluosilicic Acids/MIBK[1,2]	25/10/2	LS	40/100	50/120	LS	40/100	
Sulfuric/Lactic Acids/ Sodium Sulfate	50/20/0 - 10	40/100	50/120	65/150	40/100	50/120	40/100
Sulfurous Acid	10	50/120	50/120	50/120	50/120	50/120	50/120
Superphosphoric Acid (76% P_2O_5)	105% H3PO4	100/210	100/210	100/210	100/210	100/210	80/180
Surfactant, Anionic	All	40/100	50/120	50/120	40/100	40/100	

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Chemical Environment	Concentration %	DERAKANE or DERAKANE MOMENTUM Resin 411 °C/°F	441 °C/°F	470 °C/°F	510A/C °C/°F	510N °C/°F	8084 °C/°F
Surfactant (see under chemical name)							
Tall Oil (Storage)	100	95/200	105/220	105/220	95/200	105/220	
Tall Oil Reactor[6]		100/210	105/220	105/220	100/210	105/220	
Tallow/Sulfuric Acid	99/1	80/180	80/180				
Tannic Acid	> 0.5	100/210	100/210	100/210	100/210	100/210	65/150
Tap Water, Hard[2]	All	100/210	100/210	100/210	100/210	100/210	80/180
Tap Water, Soft[2]	All	80/180	80/180	80/180	80/180	80/180	80/180
Tartaric Acid	> 0.5	100/210	100/210	100/210	100/210	100/210	65/150
t-Butyl Methyl Ether (MTBE)	20	40/100	50/120	50/120	40/100	50/120	30/80
t-Butyl Methyl Ether (MTBE)	100	NR	25/80	25/80	NR	25/80	NR
Tetrabutyltin	100	50/120	50/120	50/120	50/120	50/120	
Tetrachloroethane	100	40/100	50/120	55/130	40/100	50/120	NR
Tetrachloroethylene (Perchloroethylene)	100	25/80	40/100	50/120	25/80	50/120	NR
Tetrachloropyridine	100	25/80	50/120	50/120	25/80	50/120	NR
Tetrahydrofuran	0-5	40/100	40/100	50/120	40/100	50/120	
Tetrahydrofuran	10-100	NR	NR	LS	NR	NR	NR
Tetrahydrofuran, Fumes, no condensation or coalescence	Fumes			80/180	80/180	80/180	
Tetramethyl Ammonium Hydroxide[1]	0 - 10	50/120	40/100		50/120	40/100	
Tetra-n-Butylammonium Hydroxide[1,2]	40	40/100	40/100		40/100	40/100	
Tetra-n-Butylphosphonium Hydroxide[1,2]	40	40/100	40/100		40/100	40/100	
Tetrapotassium Pyrophospate	0 - 60	55/130	65/150	65/150	55/130	65/150	55/130
Tetrasodium Ethylenediaminetetraacetic Acid (Tetrasodium Salt of EDTA)	All	80/180	80/180	65/150	80/180	65/150	80/180
Textone Liquid Product (50% Aqueous Solution of Sodium Chlorite, see there)							
Thermal Oxidizer (HCl Absorption) (see Flue Gas, Wet)							
Thioglycolic Acid (see Mercaptoacetic Acid)							
Thionyl Chloride	100	NR	NR	LS	NR	NR	NR
Thiourea	0 - 50	65/150	65/150	65/150	65/150	65/150	65/150
Tin Fluoborate Plating Bath: 18% Stannous Fluoborate, 7% Tin, 9% Fluoboric Acid, 2% Boric Acid[1]		100/210	100/210	100/210	100/210	100/210	80/180
Titanium Dioxide	All	80/180	80/180	80/180	80/180	80/180	80/180

For notes in English, see page 6; French, see page 14, German, see page 22; Spanish, see page 30.

Chemical Resistance Table: Maximum Service Temperatures for DERAKANE and DERAKANE MOMENTUM™ Resins—*continued*

Chemical Environment	Concentration %	DERAKANE or DERAKANE MOMENTUM Resin 411 °C/°F	441 °C/°F	470 °C/°F	510A/C °C/°F	510N °C/°F	8084 °C/°F
Titanium Dioxide/Sulfuric Acid	0 - 30/30	100/210	100/210	100/210	100/210	100/210	80/180
Titanium Tetrachloride	All	65/150	80/180	80/180	65/150	80/180	
Tobias Acid (2-Naphthylamine-1-Sulfonic)[6]	100	100/210	100/210	100/210	100/210	100/210	
Toluene	100	25/80	40/100	50/120	25/80	40/100	NR
Toluene Sulfonic Acid[6]	> 0.5	80/180	95/200	100/210	95/200	100/210	
Toluene, Fumes, no condensation or coalescence	Fumes		65/150	80/180	80/180	80/180	
Toluidine (o-, p-, m-)	100	NR	NR	20/70	NR	NR	NR
Tomato Sauce	All	90/190	90/190				
Transformer Oils (Ester types)	100	50/120	65/150	65/150		65/150	
Transformer Oils (Silicone and Mineral Oils)[16]	100	100/210	120/250	150/300	110/230	120/250	
Tributyl Phosphate	100	50/120	60/140	60/140	50/120	60/140	40/100
Trichloroacetic Acid (see Chloroacetic Acid)							
Trichloroethane	100	40/100	50/120	50/120	40/100	50/120	NR
Trichloroethylene	100	NR	NR	LS	NR	NR	NR
Trichloromonofluoromethane (see Freon 11)							
Tricresyl Phosphate	100	70/160	70/160	70/160	70/160	70/160	
Triethanolamine	100	50/120	50/120	65/150	50/120	50/120	NR
Triethylamine	All	50/120	50/120	50/120	50/120	50/120	NR
Triethylamine/Triethylamine Hydrochloride/ Hydrochloric Acid[9]	50/20/5	50/120	50/120	50/120	50/120	50/120	NR
Triethylene Glycol (see Ethylene Glycol)							
Trifluoroacetic Acid (see Chloroacetic Acid)							
Trimethyl Ammonium Chloride (Trimethylamine HCl, TMA-HCl)	70	40/100	40/100	50/120[7]	40/100	40/100	40/100
Trimethyl Benzene	100	25/80	40/100	50/120	25/80	50/120	NR
Trimethylamine	20	40/100	50/120	50/120	40/100	50/120	NR
Trimethylamine	100	25/80	25/80	40/100	25/80	25/80	
Trimethylamine, Fumes, no condensation or coalescence	Fumes			80/180	80/180	80/180	
Trimethylene Chlorobromide		NR	25/80	40/100	NR	25/80	NR
Trioctyl Phosphine Oxide/ Di 2-Ethylhexyl Phosphoric Acid (DEHPA)/Kerosene	4/4/92	80/180	80/180	80/180	80/180	80/180	
Trioctylphosphate	100	70/160	70/160	80/180	70/160	70/160	40/100
Tripropylene Glycol (see Ethylene Glycol)							

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Chemical Environment	Concentration %	DERAKANE or DERAKANE MOMENTUM Resin 411 °C/°F	441 °C/°F	470 °C/°F	510A/C °C/°F	510N °C/°F	8084 °C/°F
Trisodium Phosphate	Sat'd	100/210	120/250	120/250	100/210	120/250	80/180
TRITON X-100 Wetting Agent (see Ethylene Glycol)							
Turpentine	100	65/150	100/210	100/210	65/150	100/210	40/100
Tween Surfactant (see Ethylene Glycol)							
Ultrawet* Surfactant (see Sodium Dodecylbenzenesulfonate)							
Uran Fertilizer Urea – Ammonium Nitrate Composition: 44.3% Ammonium Nitrate, 35.4% Urea, 20.3% Water		65/150	65/150	65/150	65/150	65/150	65/150
Uranium Extraction (see Kerosene)							
Urea	0 - 50	70/160	70/160	70/160	70/160	70/160	65/150
Urea Formaldehyde Resin	All	40/100	50/120	50/120	40/100	50/120	40/100
Urea/Ammonium Nitrate/Water	35/44/20	65/150	65/150	65/150	65/150	65/150	65/150
Urine (see Urea)	All						
Vanillin Black Liquor		50/120	50/120				
VERSENE 100 Chelating Agent (see also Tetrasodium Ethylenediaminetetraacetic Acid)	All	80/180	80/180	65/150	80/180	65/150	80/180
VERSENE Chelating Agents (others)	All	50/120	50/120	50/120	50/120	50/120	
Vetran 650[1] (16.7 Vol. % VERSENE 100 Aqueous Solution, pH 9.5 - 10)		80/180	80/180	65/150	80/180	65/150	80/180
Vidden** D Fumigant (see Dichloropropane)							
Vinegar	100	100/210	100/210	100/210	100/210	100/210	65/150
Vinyl Acetate	20	40/100	40/100	40/100	40/100	40/100	NR
Vinyl Acetate	100	NR	NR	LS	NR	NR	NR
Vinyl Chloride	100	NR	NR	LS	NR	NR	NR
Vinyl Chloride Fumes, no condensation	All			80/180	80/180	80/180	
Vinyltoluene	100	25/80	50/120	50/120	25/80	50/120	NR
VORANOL** P-400 Polyol (see Ethylene Glycol)							
Water Deionized[2]	100	80/180	80/180	80/180	80/180	80/180	80/180
Water Vapor, no condensation (see Flue Gas, Dry)							

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Chemical Resistance Table: Maximum Service Temperatures for DERAKANE and DERAKANE MOMENTUM™ Resins—*continued*

Chemical Environment	Concentration %	DERAKANE or DERAKANE MOMENTUM Resin 411 °C/°F	441 °C/°F	470 °C/°F	510A/C °C/°F	510N °C/°F	8084 °C/°F
Water Vapor, Wet[2]	Sat'd	80/180	80/180	80/180	80/180	80/180	80/180
Water, Distilled[2]	100	80/180	80/180	80/180	80/180	80/180	80/180
Water, Phenol (see Phenol)							
Water, Sea, Desalination	All	80/180	80/180	80/180	80/180	80/180	80/180
Water, Steam Condensate[2]	100	80/180	80/180	80/180	80/180	80/180	80/180
Water, Tap, Hard[2]	100	100/210	100/210	100/210	100/210	100/210	80/180
Water, Tap, Soft[2]	100	80/180	80/180	80/180	80/180	80/180	80/180
Whey	All	65/150	65/150				
White Liquor (Pulp Mill)[1,2]	All	80/180	80/180	40/100	80/180	80/180	80/180
Xylene	100	25/80	40/100	50/120	25/80	50/120	NR
Xylene, Fumes, No Condensation or Coalescence	Fumes		65/150	80/180	80/180	80/180	
Xylene/Methyl Ethyl Ketone/ Butyl Acetate/Methyl Acetate	50/20/20/10	NR	NR	LS	NR	NR	NR
Zinc Chloride	Sat'd	100/210	120/250	120/250	100/210	120/250	80/180
Zinc Cyanide Plating Bath, 9% Zinc and 4% Sodium Cyanides, 9% Sodium Hydroxide[1,2]		80/180	80/180	40/100	80/180	80/180	80/180
Zinc Electrolyte (Zinc Sulfate, 35 g/L Sulfuric Acid), see Sulfuric Acid							
Zinc Fluoborate Plating Bath, 49% Zinc Fluoborate; 5% Ammonium Chloride, 6% Ammonium Fluoborate[1]		95/200	95/200	95/200	95/200	95/200	80/180
Zinc Nitrate	Sat'd	100/210	120/250	120/250	100/210	120/250	80/180
Zinc Phosphate (slurry)	> 0.5	80/180	80/180	80/180	80/180	80/180	80/180
Zinc Sulfate	Sat'd	100/210	120/250	120/250	100/210	120/250	80/180

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Printed in U.S.A Bulletin #2899