Chemical Resistance Table: Maximum Service Temperatures for Derakane and Derakane Momentum™ Resins

Chemical Environment	Concentration %	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	20		30/85	40/100			
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	LS	NR	NR	NR
Acrylic Latex	All	80/180	80/180	80/180	80/180	80/180	
Acrylonitrile	7 (max. solubility at 20°C.)	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 25C, sol. hot water)	23	80/180	80/180	80/180	80/180	80/180	
Air (max. surface temperature of the FRP) <16>		180/360	180/360	200/392	160/320	160/320	
Alachlore, Herbicide <4>	All			40/100			
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
Alcohol, Isodecyl	100	50/120	65/150	80/180	50/120	65/150	50/120
Alcohol, Propyl	100	40/100	40/100	50/120	40/100	40/100	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	
Alkyldiphenyloxide Disulfonate (Surfactant type: Anionic)	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 %	411 °C/°F	441 °C/°F	470 °C/°F	510A/C °C/°F	510N °C/°F	8084 °C/°F
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		
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
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	0.5 - 5	80/180	80/180	65/150	80/180	65/150	80/180
Ammonium Hydroxide	6 - 20	65/150	65/150	40/100	65/150	40/100	65/150
Ammonium Hydroxide	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	120/250	120/250	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 Propionate	> 0.5	25/80	25/80	40/100	25/80	25/80	NR
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	

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Chemical Resistance Table: Maximum Service Temperatures for Derakane and Derakane Momentum™ Resins—*continued*

Chemical Environment	Concentration %	411 °C/°F	441 °C/°F	470 °C/°F	510A/C °C/°F	510N °C/°F	8084 °C/°F
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	
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 Hydrochlorid Acid	> 99	40/100	40/100	40/100	40/100	40/100	40/100
Aqua Regia <6>							
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 <18>	> 0.5	75/170	75/170				
Beer <18>	> 0.5	50/120	50/120				
Beet Sugar Liquor <18>	> 0.5	80/180	80/180				
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, 50°C/120°F	100	NR	NR	LS	NR	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/Ethyl Benzene/Toluene/ Trimethyl Benzene/ Xylene	All	NR	NR	40/100	NR	LS	NR
Benzene: Ethylbenzene	33/67	NR	25/80	40/100	NR	25/80	NR
Benzenesulfonyl Chloride	100	NR	NR	LS	NR	NR	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
Benzyl Alcohol	100	NR	25/80	40/100	NR	25/80	NR
Benzyl Chloride <2>	100	NR	NR	40/100	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	

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Chemical Resistance Table: Maximum Service Temperatures for Derakane and Derakane Momentum™ Resins—*continued*

Chemical Environment	Concentration %	411 °C/°F	441 °C/°F	470 °C/°F	510A/C °C/°F	510N °C/°F	8084 °C/°F
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% Na_2SO_4, 2.0% K_2SO_4, 7% $CaSO_4:2H_2O$, 3% $Na_2SO_3:9H_2O$, 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 in Water (no pure Bromine phase)	< Sat'd			80/180			
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
Butyl Acetate	100	NR	25/80	30/90	NR	25/80	NR
Butyl Acrylate	100	NR	NR	25/80	NR	NR	NR
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 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 <2,3,5,9>	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

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Calcium Sulfite	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180
Cane Sugar Liquor & Sweetwater <18>	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
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 <18>	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	
Carboxyethyl Cellulose	10	65/150	65/150	65/150	65/150	65/150	65/150
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 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 <8>	Sat'd Cl2	80/180	80/180	95/200	80/180	95/200	
Chlorinated Brine, pH > 9 (Hypochlorite), <2,3,9>	Sat'd Cl2	80/180	80/180	65/150	80/180	65/150	
Chlorinated Brine, pH 2.5-9<6>	Sat'd Cl2						
Chlorinated Pulp <6>	All	80/180	90/190	95/200	90/190	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	90/190	95/200	90/190	95/200	
Chlorine Dioxide, No Chlorine (Bleaching Solution, with or without Pulp) <6>	All	80/180	90/190	95/200	90/190	95/200	
Chlorine Dioxide, Solution Storage	Sat'd	20/70	20/70	20/70	20/70	20/70	
Chlorine Water (See Chlorinated brine)							
Chlorine, dry gas <2,8,17>	100	80/180	90/190	**100/210**	80/180	100/210	65/150
Chlorine, wet gas <2,8,17>	100	80/180	90/190	**100/210**	80/180	100/210	65/150
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

For notes in English, see page 8; French, see page 16; German, see page 24; Portuguese, see page 32; Spanish, see page 40.

In bold: preferred resin

Chemical Resistance Table: Maximum Service Temperatures for Derakane and Derakane Momentum™ Resins—*continued*

Chemical Environment	Concentration %	411 °C/°F	441 °C/°F	470 °C/°F	510A/C °C/°F	510N °C/°F	8084 °C/°F
Chlorofluorocarbon (CFC): R-11 (Trichlorofluoromethane), R-12 (Dichlorodifluoromethane)	100	25/80	40/100	40/100	25/80	40/100	NR
Chlorofluorocarbon (CFC): CFC-113 (Trichlorotrifluoroethane)		40/100	40/100	40/100	40/100	40/100	
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
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
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 <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 <18>	100	80/180	95/200	95/200	80/180	95/200	80/180
Cod-liver Oil <18>	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% FeCl3, 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(BF4)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 <18>	100	80/180	100/210	100/210	80/180	100/210	65/150
Corn Starch <18>	Slurry	100/210	100/210				

For notes in English, see page 8; French, see page 16; German, see page 24; Portuguese, see page 32; Spanish, see page 40.

Chemical Resistance Table: Maximum Service Temperatures for Derakane and Derakane Momentum™ Resins—*continued*

Chemical Environment	Concentration %	411 °C/°F	441 °C/°F	470 °C/°F	510A/C °C/°F	510N °C/°F	8084 °C/°F
Corn Sugar/Syrup (Glucose) <18>	All	80/180	80/180				
Cottonseed Oil <18>	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
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, Sodium salt (Also 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
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-Propionamide	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
Dichloropropene	100	NR	NR	25/80	NR	NR	NR
Dichloropropionic Acid	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

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Chemical Resistance Table: Maximum Service Temperatures for Derakane and Derakane Momentum™ Resins—*continued*

Chemical Environment	Concentration %	411 °C/°F	441 °C/°F	470 °C/°F	510A/C °C/°F	510N °C/°F	8084 °C/°F
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
Diethylene Glycol n-Butyl Ether also called Ethanol,2-(2-butoxy-ethoxy)- ; CAS N°112-34-5	100	40/100	40/100	40/100	40/100	40/100	NR
Diethylene Glycol Methyl Ether CAS N°111-77-3	100	NR	NR	LS	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	
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
2,4-D, Dimethylamine salt	67	50/120	50/120	50/120	50/120	50/120	
Dimethyl Aniline	100	NR	LS	40/100	NR	25/80	LS
Dimethylcarbonate	100	NR	NR	NR	NR	NR	NR
Dimethylethanolamine	20	50/120	50/120	60/140			
Dimethylethanolamine	100	25/80	30/85	40/100	25/80	30/85	NR
Dimethylformamide	20	40/100	40/100	40/100	40/100	40/100	
Dimethylformamide	100	NR	NR	LS	NR	NR	NR
Dimethylformamide, Fumes, no condensation or coalescence	fumes			80/180	80/180	80/180	
Dimethylformamide/ Acetonitrile/ Methanol	26/9/7	NR	NR	LS	NR	NR	NR
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 (DMSO)	20	40/100	40/100	40/100	40/100	40/100	40/100
Dimethyl Sulfoxide (DMSO)	100	NR	LS	LS	NR	NR	NR
2,2-Dimethyl Thiazolidine	1	65/150	80/180	80/180	65/150	80/180	
Dimethyl Tin Dichloride / Methyl Tin Tri-chloride (90/10) in aqueous solution <7>	50			45/110			
Dioctyl Phthalate	100	65/150	100/210	100/210	65/150	100/210	65/150
Diphenylmethane-4,4-Diisocyanate (MDI)	100	NR	NR	NR	NR	NR	NR
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

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Chemical Resistance Table: Maximum Service Temperatures for Derakane and Derakane Momentum™ Resins—*continued*

Chemical Environment	Concentration %	411 °C/°F	441 °C/°F	470 °C/°F	510A/C °C/°F	510N °C/°F	8084 °C/°F
Dipropylene Glycol Methyl Ether, Propanol, (2-Methoxy-methylethoxy)- ; CAS 34590-94-8	20	40/100	50/120	65/150	50/120	65/150	40/100
Dipropylene Glycol Methyl Ether , Propanol, (2-Methoxy-methylethoxy)- ; CAS 34590-94-8	100	NR	LS	20/70	NR	NR	NR
Dishwashing Detergent in Solution <14>	All	80/180	80/180	65/150	80/180	65/150	80/180
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
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	
DOWTHERM* Heat Transfer Agent	100	50/120	65/150	65/150	50/120	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 Alkyl Amines, C12 and higher	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
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 Benzyl Chloride <2>	100	NR	NR	40	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 Silicate	100			40/100			
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)							
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)							

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Chemical Resistance Table: Maximum Service Temperatures for Derakane and Derakane Momentum™ Resins—*continued*

Chemical Environment	Concentration %	411 °C/°F	441 °C/°F	470 °C/°F	510A/C °C/°F	510N °C/°F	8084 °C/°F
Ethylene Dichloride/Ethylene Dibromide/ Tetra Ethyl Lead (above water solublity)	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 based Coolants	> 0.5	100/210	100/210	100/210	100/210	100/210	
Ethylene Glycol n-Butylether: Ethanol, 2-butoxy; CAS N°111-76-2	20	40/100	50/120	65/150	50/120	65/150	40/100
Ethylene Glycol n-Butylether: Ethanol, 2-butoxy; CAS N°111-76-2	100	40/100	40/100	65/150	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)	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 <18>	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
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/ Ferrous Chloride/ 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 32-0-0 (32% wt of total nitrogen), Urea-Ammonium Nitrate solution.		65/150	65/150	65/150	65/150	65/150	65/150
Fertilizer 8-8-8 (% wt of total nitrogen, phosphorus, and potassium)		65/150	65/150	65/150	65/150	65/150	65/150
Flue Gas, Dry <16>	All	165/325	175/350	205/400	160/320	160/320	
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>	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>	11-20	60/140	60/140	60/140	60/140	60/140	60/140
Fluosilicic Acid <1,2>	21-35	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
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			

For notes in English, see page 8; French, see page 16; German, see page 24; Portuguese, see page 32; Spanish, see page 40.

Chemical Resistance Table: Maximum Service Temperatures for Derakane and Derakane Momentum™ Resins—*continued*

Chemical Environment	Concentration %	411 °C/°F	441 °C/°F	470 °C/°F	510A/C °C/°F	510N °C/°F	8084 °C/°F
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
Gallic Acid	Sat'd	80/180	80/180	80/180	80/180	80/180	
Gasohol (1-100% Alcohol)	100			40/100			
Gasoline, no alcohol	100			50/120			
Glucose <18>	100	80/180	80/180				
Glutamic Acid <18>	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
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
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	fumes	100/210	100/210	100/210	100/210	100/210	80/180
Herbicides <6>							
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

For notes in English, see page 8; French, see page 16; German, see page 24; Portuguese, see page 32; Spanish, see page 40.

Chemical Resistance Table: Maximum Service Temperatures for Derakane and Derakane Momentum™ Resins—*continued*

Chemical Environment	Concentration %	411 °C/°F	441 °C/°F	470 °C/°F	510A/C °C/°F	510N °C/°F	8084 °C/°F
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
Hydrochloric Acid + Aluminum (Reactor), 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 <8,9,12>	0.5 - 20% HCl	80/180	90/190	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 / 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	50/120	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/ Nitirc 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
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)							
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>	5	65/150	65/150	65/150	65/150	65/150	65/150
Hydrogen Peroxide <2,3,6>	30	40/100	40/100	65/165	40/100	65/150	40/100

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In bold: preferred resin

Chemical Resistance Table: Maximum Service Temperatures for Derakane and Derakane Momentum™ Resins—*continued*

Chemical Environment	Concentration %	411 °C/°F	441 °C/°F	470 °C/°F	510A/C °C/°F	510N °C/°F	8084 °C/°F
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 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
Hydrogenated tallow alkyl amine (C8-C18)	100	40/100	40/100				
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
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 <6>							
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							
Insecticides emulsions <6>							
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
Ion Exchange Resin, fine mesh resins		80/180	80/180	80/180	80/180	80/180	80/180
Iron and Steel Cleaning Bath, 9% Hydrochloric, 23% Sulfuric acid		80/180	100/210	100/210	80/180	100/210	80/180
Iron Plating Solution 45% FeCl2; 15% CaCl2; 20% FeSO4; 11% (NH4)2SO4		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
Kraft Recovery Boiler Breeching (see Flue Gas)							
Lactic Acid	All	100/210	100/210	100/210	100/210	100/210	65/150
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)							

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Chemical Resistance Table: Maximum Service Temperatures for Derakane and Derakane Momentum™ Resins—*continued*

Chemical Environment	Concentration %	411 °C/°F	441 °C/°F	470 °C/°F	510A/C °C/°F	510N °C/°F	8084 °C/°F
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 <2,3,5,9>	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
Flocculant MW>40.000, cationic polyamine <6>	All	60/140	60/140	60/140	60/140	60/140	60/140
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
Manganese Sulfate (Manganous Sulfate)	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180
MDI, see Diphenylmethane-4,4-Diisocyanate	100						
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	NR	NR	LS	NR	NR	NR
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
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
Methyl Bromide	10	25/80	25/80	25/80	25/80	25/80	NR
Methyl Bromide	100	NR	NR	LS	NR	NR	NR
2-Methyl-3-Butenenitrile	All	25/80	40/100	40/100	25/80	40/100	
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

For notes in English, see page 8; French, see page 16; German, see page 24; Portuguese, see page 32; Spanish, see page 40.

Chemical Resistance Table: Maximum Service Temperatures for Derakane and Derakane Momentum™ Resins—*continued*

Chemical Environment	Concentration %	411 °C/°F	441 °C/°F	470 °C/°F	510A/C °C/°F	510N °C/°F	8084 °C/°F
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 Chloroform (also 1,1,1-Trichloroethane inhibited)	100	40/100	50/120	50/120	40/100	50/120	NR
Methyl chloroform / Perchloroethylene	75/25	40/100	50/120	50/120	40/100	50/120	
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	
Methyl Distearyl Ammonium Chloride/ Isopropanol	75/25	50/120	50/120	50/120	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
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
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
Methylstyrene (alpha)	100	25/80	40/100	50/120	25/80	40/100	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	
Methyl Tin Trichloride / Dimethyl Tin Di-chloride (10/90) in aqueous solution <7>	50			45/110			
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	
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

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Chemical Resistance Table: Maximum Service Temperatures for Derakane and Derakane Momentum™ Resins—*continued*

Chemical Environment	Concentration %	411 °C/°F	441 °C/°F	470 °C/°F	510A/C °C/°F	510N °C/°F	8084 °C/°F
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 <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
Nitrophenol <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 <18>	100	100/210	120/250				
Ortho-dichlorobenzene (see Dichlorobenzene)							
Oxalic Acid <18>	Sat'd	50/120	50/120	50/120	50/120	50/120	
Ozone in solution <6>	2mg/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 <18>	100	100/210	120/250				
Paper Mill Effluent (see Sulfite/Sulfate Liquors (Pulp Mill))							
Para-dichlorobenzene (see Dichlorobenzene)							
Peanut Oil <18>	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
Perchloroethylene / Methyl chloroform	75/25	40/100	50/120	50/120	40/100	50/120	
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

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Chemical Resistance Table: Maximum Service Temperatures for Derakane and Derakane Momentum™ Resins—*continued*

Chemical Environment	Concentration %	411 °C/°F	441 °C/°F	470 °C/°F	510A/C °C/°F	510N °C/°F	8084 °C/°F
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			
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% P2O5)	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 Cl2 <8,9,12>	15:9	100/210	100/210	100/210	100/210	100/210	
Phosphoric Acid / Sulfuric Acid	0-25/0-25	80/180	80/180	80/180	80/180	80/180	80/180
Phosphoric/ Sulfuric/ Hydrofluoric Acid <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 / Hydrochloric Acid <9,15>	0-70/1-5	100/210	100/210	100/210	100/210	100/210	80/180
Phosphorous Acid / Hydrochloric Acid <8,9,15>	0-70/6-10	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	100	100/210	100/210	100/210	100/210	100/210	65/150
Polyethylene glycol methyl ether <6>	100						
Polyethyleneimine	All	80/180	80/180	80/180	80/180	80/180	
Polyphosphoric Acid 115% H3PO4 (See phosphoric acid)							
Polyvinyl Acetate Adhesives	All	50/120	50/120	50/120	50/120	50/120	
Polyvinyl Alcohol	100	80/180	80/180	80/180	80/180	80/180	
Polyvinyl Chloride Latex with 35 parts Dioctyl Phthalate	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

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Chemical Resistance Table: Maximum Service Temperatures for Derakane and Derakane Momentum™ Resins—*continued*

Chemical Environment	Concentration %	411 °C/°F	441 °C/°F	470 °C/°F	510A/C °C/°F	510N °C/°F	8084 °C/°F
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 <2,3,9>	50/40/10	50/120					
Potassium Iodide	All	100/210	100/210	100/210	100/210	100/210	100/210
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	40/100	40/100	50/120	40/100	40/100	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 Methyl Ether, 2-Propanol,1-Methoxy- ; CAS 107-98-2	100	NR	LS	20/70	NR	NR	NR
Propylene Glycol Methyl Ether Acetate; CAS N°108-65-6 <2>	20	40/100	50/120	50/120	40/100	50/120	40/100
Propylene Glycol Methyl Ether Acetate; CAS N°108-65-6 <2>	100	NR	LS	20/70	NR	NR	NR
Propylene Glycol/ Ethoxylated Fatty Alcohols/ Diethylene Glycol n-Butyl Ether	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 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

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Chemical Resistance Table: Maximum Service Temperatures for Derakane and Derakane Momentum™ Resins—*continued*

Chemical Environment	Concentration %	411 °C/°F	441 °C/°F	470 °C/°F	510A/C °C/°F	510N °C/°F	8084 °C/°F
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
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 saturated solution (See Salt Brine)	Sat'd						
Sodium Chloride with Chlorine (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, <2,3,9>	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
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	95/200	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 Hydrosulfite	All	40/100	40/100	40/100	40/100	40/100	40/100

For notes in English, see page 8; French, see page 16; German, see page 24; Portuguese, see page 32; Spanish, see page 40.

Chemical Resistance Table: Maximum Service Temperatures for Derakane and Derakane Momentum™ Resins—*continued*

Chemical Environment	Concentration %	411 °C/°F	441 °C/°F	470 °C/°F	510A/C °C/°F	510N °C/°F	8084 °C/°F
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) <2,3,5,9>	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/ traces	80/180	65/150				
Sodium Hydroxide/Sodium Hypochlorite (active Chlorine) <1,2>	0-20/0-0.1	80/180					
Sodium Hypochlorite (active Chlorine), pH > 11, <2,3,5,9>	0.5-5.25	65/150	65/150	40/100	80/180	65/150	65/150
Sodium Hypochlorite (active Chlorine), pH > 11, <2,3,5,9,19>	5.25-18	65/150	50/120		**65/150**	50/120	65/150
Sodium Hypochlorite (active Chlorine), pH > 11, <2,3,5,9,19>	18-21		40/100		510A: 50/120; 510C:45/110		
Sodium Hypochlorite (active Chlorine), pH > 11, <2,3,5,9,19>	21-25				**510A only: 40/100**		
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
Sodium Phosphate, mono-, di-, tribasic	> 0.5	100/210	100/210	100/210	100/210	100/210	80/180
Sodium Polyacrylate	All	80/180	80/180	80/180	80/180	80/180	
Sodium salt o-phenylphenate (Antimicrobial)	All	50/120	50/120	50/120	50/120	50/120	
Sodium Sarcosinate	40	50/120	50/120	50/120	50/120	50/120	
Sodium Silicate <1>	> 0.5	80/180	80/180	65/150	80/180	65/150	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% Amines tri-C8-C10-alkyl, 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	

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In bold: preferred resin

Chemical Resistance Table: Maximum Service Temperatures for Derakane and Derakane Momentum™ Resins—*continued*

Chemical Environment	Concentration %	411 °C/°F	441 °C/°F	470 °C/°F	510A/C °C/°F	510N °C/°F	8084 °C/°F
Sorbitol Solutions	All	70/160	70/160	80/180	70/160	70/160	
Sour Crude Oil (see crude oil)							
Soy (Soya) Sauce <18>		70/160	70/160				
Soya Oil <18>	100	100/210	100/210	100/210	100/210	100/210	65/150
Spearmint Oil <18>	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 <18>	All	100/210	100/210				
Sugar Beet, Liquor <18>	All	80/180	80/180				
Sugar Cane, Liquor & Sweetwater <18>	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) <4,6>	> 0.5	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 <6>	Fumes						
Sulfur Trioxide, wet <6>, 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 - 80/180	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
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			

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Chemical Resistance Table: Maximum Service Temperatures for Derakane and Derakane Momentum™ Resins—*continued*

Chemical Environment	Concentration %	411 °C/°F	441 °C/°F	470 °C/°F	510A/C °C/°F	510N °C/°F	8084 °C/°F
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	50/120	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% P2O5) (See Phosphoric acid)	105% H3PO4						
Surfactant, Anionic	All	40/100	50/120	50/120	40/100	40/100	
Surfactant <6>							
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	30/90
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
Tetraethyl Orthosilicate	100			40/100			
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
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
Titanium Dioxide/ Sulfuric Acid	0-30/30	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 %	411 °C/°F	441 °C/°F	470 °C/°F	510A/C °C/°F	510N °C/°F	8084 °C/°F
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 Diisocyanate (TDI) <2>	100	NR	NR	30/85 <6>	NR	NR	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	85	25/80	40/100	50/120	25/80	40/100	25/80
Trichloroethane	100	40/100	50/120	50/120	40/100	50/120	NR
Trichloroethylene	100	NR	NR	LS	NR	NR	NR
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	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							
Trisodium Phosphate	Sat'd	100/210	120/250	120/250	100/210	120/250	80/180
Turpentine	100	65/150	100/210	100/210	65/150	100/210	40/100
Uranium Extraction, see Kerosene							
Urea	All	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 <18>		50/120	50/120				
Vinegar <18>	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
Water Deionized <2>	100	80/180	80/180	80/180	80/180	80/180	80/180
Water Vapor, no condensation, see Flue Gas, dry							
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

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Chemical Resistance Table: Maximum Service Temperatures for Derakane and Derakane Momentum™ Resins—*continued*

Chemical Environment	Concentration %	411 °C/°F	441 °C/°F	470 °C/°F	510A/C °C/°F	510N °C/°F	8084 °C/°F
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, 35g/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

Notes