

Chemical Resistance Guide - Structural Shapes

The data in this chemical resistance guide is based on field service performance, laboratory testing and extrapolated values from our resin manufacturers' recommendation. Data shown is intended as a guide only. It is recommended that for a specific application, testing be done in the actual chemical environment.

The following conditions will effect the suitability of a specific resin laminate:

- Periodic changes in temperature
- Temperature spikes
- Changes in chemical concentrations
- Combinations of chemicals
- Exposure to vapors only
- Exposure to frequent splashes and spills
- Exposure to intermittent splashes and spills
- Frequency of maintenance wash down
- Load bearing or non-load bearing requirements

Chemical Environment	Maximum Recommended Service Temperatures, °F		Chemical Environment	Maximum Recommended Service Temperatures, °F	
	VEFR	ISO/ISOFR		VEFR	ISO/ISOFR
Acetic Acid, to 10%	170	80	Butyl Acetate	NR	NR
Acetic Acid, to 50%	180	NR	Butyl Alcohol	80	NR
Acetic Acid, Glacial	NR	NR	Calcium Carbonate	170	120
Acetone	NR	NR	Calcium Hydroxide	140	120
Aluminum Chloride	170	120	Calcium Hypochlorite	120	NR
Aluminum Hydroxide	140	120	Calcium Nitrate	170	120
Aluminum Nitrate	140	120	Calcium Sulfate	170	120
Aluminum Sulfate	170	120	Carbon Disulfide	NR	NR
Ammonium Chloride	170	120	Carbon Monoxide Gas	170	160
Ammonium Hydroxide, 5%	140	NR	Carbon Dioxide Gas	170	160
Ammonium Nitrate, to 50%	170	120	Carbon Tetrachloride		
Ammonium Nitrate, Saturated	170	NR	Liquid or Vapor	110	NR
Ammonium Persulfate, to 25%	140	90	Chlorine, Dry Gas	170	NR
Ammonium Phosphate	170	120	Chlorine, Wet Gas	170	NR
Ammonium Sulfate	170	120	Chlorine Water	140	NR
Amyl Alcohol	80	NR	Chloroform	NR	NR
Barium Carbonate	170	120	Chromic Acid, to 5%	110	NR
Barium Chloride	170	120	Chromous Sulfate	140	120
Barium Sulfate	170	120	Citric Acid	170	120
Benzene	NR	NR	Copper Chloride	170	170
Benzene Sulfonic Acid 50%	110	NR	Copper Cyanide	170	170
Benzoic Acid	170	120	Copper Nitrate	170	170
Benzyl Alcohol	NR	NR	Crude Oil, Sour	170	170
Borax	170	120	Cyclohexane, Liquid and Vapor	170	NR
Brine (Sodium Chloride Sol.)	170	120	Diesel Fuel	140	90
Bromine, Liquid or Vapor	NR	NR	Ethyl Acetate	NR	NR
Ethyl Alcohol	NR	NR	Phosphoric Acid, Vapor	170	120
Ethylene Glycol	170	120	Potassium Aluminum Sulfate	170	120
Fatty Acids	170	80	Potassium Bicarbonate	110	100
Ferric Chloride	170	10	Potassium Carbonate, to 10%	110	NR
Ferric Sulfate	170	110	Potassium Chloride	170	120
Formaldehyde	110	NR	Potassium Hydroxide	140	NR
Fuel Oil	140	80	Potassium Nitrate	170	120

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	VEFR	ISO/ISOFR		VEFR	ISO/ISOFR
Glucose	170	100	Propylene Glycol	170	120
Glycerine	170	100	Sodium Acetate	170	120
Hexane	120	90	Sodium Benzoate	140	120
Hydraulic Fluid (Glycol Based)	140	NR	Sodium Bicarbonate	140	120
Hydraulic Fluid Skydraul	140	NR	Sodium Bisulfate	170	120
Hydrobromic Acid	110	NR	Sodium Bisulfite	170	120
Hydrochloric Acid, up to 15%	140	80	Sodium Borate	170	120
Hydrochloric Acid, Concentrated	110	NR	Sodium Bromide	170	120
Hydrogen Bromide, Dry Gas	140	80	Sodium Carbonate, to 10%	140	70
Hydrogen Bromine, Wet Gas	140	NR	Sodium Chloride	170	120
Hydrogen Chloride, Dry Gas	170	80	Sodium Cyanide	170	120
Hydrogen Chloride, Wet Gas	170	80	Sodium Dichromate	170	120
Hydrogen Flouride, Sol or Vapor	140	NR	Sodium Diphosphate	170	120
Hydrogen Peroxide, to 10%	110	NR	Sodium Hydroxide, 10%	140	NR
Hydrogen Sulfide, Dry Gas	140	80	Sodium Hypochlorite, to 5 ¼ %	110	70
Hydrogen Sulfide, Wet Gas	140	80	Sodium Monophosphate	170	120
Isopropyl Alcohol	80	NR	Sodium Nitrate	170	120
JP-4	140	80	Sodium Nitrite	170	120
Kerosene	140	110	Sodium Sulfate	170	120
Lactic Acid	170	120	Sodium Tetraborate	140	120
Lead Acetate	170	120	Sodium Thiosulfate	140	120
Linseed Oil	170	100	Soy Oil	170	100
Lithium Chloride	170	120	Stearic Acid	170	120
Magnesium Carbonate	170	120	Styrene	NR	NR
Magnesium Chloride	170	120	Sulfamic Acid	170	120
Magnesium Hydroxide	170	100	Sulfated Detergents	NR	120
Magnesium Nitrate	170	120	Sulfite Liquor	160	100
Magnesium Sulfate	170	120	Sulfur Dioxide, gas-dry	170	120
Mercuric Chloride	170	120	Sulfur Dioxide, gas-wet	170	70
Mercury Metal	170	120	Sulfur Trioxide, gas-wet or dry	170	NR
Methyl Ethyl Ketone	NR	NR	Sulfuric Acid, to 25%	170	80
Mineral Oil	170	120	Tartaric Acid	170	120
Monochlorobenzene	NR	NR	Tetrachloroethylene	NR	NR
Naphtha	140	120	Toluene	NR	NR
Nickel Chloride	170	120	Trichloroethylene vapor	NR	NR
Nitric Acid, to 5%	110	100	Trisodium Phosphate	170	NR
Nitric Acid, Concentrated	NR	NR	Urea, 35%	110	NR
Nitric Acid, Vapor	140	100	Vinegar	170	150
Oleic Acid	170	120	Water, Distilled	180	150
Oxalic Acid	170	120	Water, Tap	180	120
Paper Mill Liquor	100	100	Zinc Chloride	170	120
Phenol Solution or Vapor	NR	NR	Zinc Nitrate	170	120
Phosphoric Acid	170	100	Zinc Sulfate	170	120
Phosphoric Acid, Salts thereof	170	120			