

# Chemical Resistance Guide



Chemical Environment	% Concentration	Temp °F	Molded		Pultruded	
			ISOFR	VEFR	VEFR	ISOFR
Acetic Acid	50	MAX	C	C	C	C
Acetone	100	75	T	S	I	N
Alcohols	100	120	I	C	I	I
Alum	ALL	MAX	C	C	C	C
Aluminum Chloride	ALL	MAX	C	C	C	C
Aluminum Fluoride	20	75	I	C	I	I
Ammonium Hydroxide	30	75	N	C	I	N
Ammonium Salts-Neutral	ALL	120	S	S	C	S
Ammonium Salts-Aggressive	ALL	75	T	S	T	N
Aromatic Solvents	ALL	75	N	T	N	N
Barium Salts	ALL		C	C	C	C
Benzene	100	140	N	I	I	N
Calcium Hydroxide	25	MAX	I	C	S	I
Calcium Hypochlorite	ALL	MAX	N	C	I	N
Calcium Salts	ALL	MAX	C	C	C	C
Carbon Tetrachloride	100	75	N	C	S	N
Chlorinated Hydrocarbons	100	75	T	T	T	T
Chlorine Dioxide	SAT	140	N	C	S	N
Chlorine Water	SAT	120	T	C	I	N
Chlorine, Wet	SAT	MAX	N	C	N	N
Chlorobenzene	100	75	N	S	N	N
Chlorobenzene	ALL	Up to 100	N	C	N	N
Chloroform	100	75	N	N	N	N
Chromic Acid	50	140	N	S	I	N
Citric Acid	ALL	MAX	C	C	C	C
Copper Cyanide Plating	ALL	125	I	C	S	I
Copper Salts	ALL	MAX	C	C	C	C
Crude Oil (Sweet or Sour)	ALL	MAX	C	C	C	C
Dichlorobenzene	100	75	N	T	N	N
Ethers	100	75	N	T	N	N
Ferric Chloride	100		C	C	C	C
Ferric Salts	ALL	MAX	C	C	C	C
Fluoride Salts+HCl	ALL	75	N	C	I	N
Fluosilicic Acid	10	75	S	C	S	I
Formaldehyde	37	150	I	C	S	I
Formic Acid	25	100	I	C	S	I
Fuel (Diesel, Jet, Gasoline)	ALL	100	C	C	C	C
Glycerine	100	MAX	C	C	C	C
Green Liquor (Pulp Mill)	ALL	MAX	N	C	I	N

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Hydrobromic Acid	48	MAX	I	S	I	N
Hydrochloric Acid	10	MAX	S	C	S	S
Hydrochloric Acid	30	MAX	I	C	I	I
Hydrochloric Acid (concentrated)	ALL	Up to 180	N	I	N	N
Acid Hydrocyanic	ALL	MAX	I	C	S	I
Hydrofluoric Acid	20	75	N	S	N	N
Hydrogen Peroxide	30	75	N	C	S	N
Lactic Acid	100	MAX	C	C	C	C
Lime Slurry	SAT	MAX	C	C	C	C
Lithium Chloride	SAT	MAX	N	N	N	N
Lithium Salts	ALL	MAX	C	C	T	T
Magnesium Salts	ALL	MAX	C	C	C	C
Maleic Acid	100	MAX	I	C	S	I
Mercury Chloride	100	MAX	C	C	C	C
Nickel Salts	ALL	MAX	C	C	C	C
Nitric Acid	20	120	I	C	I	I
Nitric Acid	35	100	N	C	I	N
Nitric Acid	40	Ambient	N	I	N	N
Nitric, Hydrofluoric	20	75	N	I	N	N
Nitrous Acid	10	75	C	C	C	C
Ozone for Sewage Treatment		100	C	C	C	C
Perchloroethylene	100	75	N	S	I	N
Phenol	10	75	N	C	I	N
Phenol	88	Ambient	N	S	N	N
Phosphoric Acid	85	MAX	S	C	C	S
Phosphoric Acid, Super	115	MAX	T	C	S	N
Potassium Hydroxide	10	120	N	C	S	N
Potassium Salts	ALL	MAX	C	C	C	C
Silver Nitrate	100	MAX	C	C	C	C
Sodium Cyanide	ALL	75	I	C	S	I
Sodium Hydroxide	50		N	C	I	N
Sodium Hydroxide	10	MAX	N	C	N	N
Sodium Hypochlorite (Stable)	10	100	I	C	S	I
Sodium Salts-Neutral	ALL	MAX	C	C	C	C
Sodium Salts-Aggressive	ALL	75	T	S	T	N
Sulfur Dioxide	SAT	MAX	S	C	S	S
Sulfuric Acid	25	MAX	I	C	S	I
Sulfuric Acid	50	MAX	N	C	S	N
Sulfuric Acid	75	100	N	C	I	N
Toluene	100	120	N	S	I	N
Trichloroethane 1,1,1	ALL	75	N	S	I	N

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Trisodium Phosphate	50	MAX	I	C	I	N
Water (Fresh, Salt, Moderate D.I.)	100	MAX	C	C	C	C
Wet Chlorine/Hydrochloric Acid	0-20	MAX	N	S	N	N
White Liquor (Pulp Mill)	ALL	Up to 350	N	C	S	N
Zinc Chloride Plating	ALL	MAX	N	C	S	N
Zinc Salts	100	75	C	C	C	C

- C - Continuous exposure of the grating to the Chemical Environment listed at the temperature listed.  
S - Frequent exposure of the grating to splashes and spills from the Chemical Environment listed with that environment at the temperature listed.  
I - Infrequent exposure of the grating to splashes and spills from the Chemical Environment listed with that environment at the temperature listed and the spill immediately cleaned up or washed from the grating.  
N - Not recommended for the concentrations and temperatures listed.  
T - Test

MAX TEMP is 400°F for vinylester; 180° for Pultruded VEFR; 150° and for Pultruded ISOFR; 140°

The information in this Corrosion Guide is correct to the best of **Saudi Composite** knowledge. It is based on extensive experience with fiberglass grating in corrosive applications. Because actual use conditions differ and mixtures of corrosives will occur in service, the end user must test for use under actual conditions. **Saudi Composite** responsibility for claims arising from breach of warranty, negligence or otherwise is limited to the purchase price of the material sold by Saudi Composite. Test coupons are available upon specific request.