

# FRP Grating

## Allowable Environmental Service Conditions

CHEMICAL EXPOSURE	TYPE 'V'		TYPE 'I'		CHEMICAL EXPOSURE	TYPE 'V'		TYPE 'I'	
	% CONCENTRATION	MAX. OPER. TEMP. °F / °C	% CONCENTRATION	MAX. OPER. TEMP. °F / °C		% CONCENTRATION	MAX. OPER. TEMP. °F / °C	% CONCENTRATION	MAX. OPER. TEMP. °F / °C
Acetic Acid	50	180/82	50	125/52	Lithium Chloride	SAT	210/99	SAT	150/66
Aluminium Hydroxide	100	180/82	100	160/71	Magnesium Chloride	ALL	210/99	ALL	170/77
Ammonium Chloride	ALL	210/99	ALL	170/77	Magnesium Nitrate	ALL	210/99	ALL	140/60
Ammonium Hydroxide	28	100/38	28	N/R	Magnesium Sulphate	ALL	210/99	ALL	170/77
Ammonium Bicarbonate	50	160/71	15	125/52	Mercuric Chloride	100	210/99	100	150/66
Ammonium Sulphate	ALL	210/99	ALL	170/77	Mercurous Chloride	ALL	210/99	ALL	140/60
Benzene	N/R	N/R	N/R	N/R	Nickel Chloride	ALL	210/99	ALL	170/77
Benzoic Acid	SAT	210/99	SAT	150/66	Nickel Sulphate	ALL	210/99	ALL	170/77
Borax	SAT	210/99	SAT	170/77	Nitric Acid	20	120/49	20	70/21
Calcium Carbonate	ALL	180/82	ALL	170/77	Oxalic Acid	ALL	210/99	ALL	75/24
Calcium Nitrate	ALL	210/99	ALL	180/82	Perchloric Acid	30	100/38	N/R	N/R
Carbon Tetrachloride	100	150/65	N/R	N/R	Phosphoric Acid	100	210/99	100	120/49
Chlorine - Dry Gas	-	210/99	-	140/60	Potassium Chloride	ALL	210/99	ALL	170/77
Chlorine - Water	SAT	200/93	SAT	80/27	Potassium Dichromate	ALL	210/99	ALL	170/77
Chromic Acid	10	150/65	5	70/21	Potassium Nitrate	ALL	210/99	ALL	170/77
Citric Acid	ALL	210/99	ALL	170/77	Potassium Sulphate	ALL	210/99	ALL	170/77
Copper Chloride	ALL	210/99	ALL	170/77	Propylene Glycol	ALL	210/99	ALL	170/77
Copper Cyanide	ALL	210/99	ALL	170/77	Sodium Acetate	ALL	210/99	ALL	160/71
Copper Nitrate	ALL	210/99	ALL	170/77	Sodium Bisulphate	ALL	210/99	ALL	170/77
Ethanol	50	100/38	50	75/24	Sodium Cyanide	ALL	210/99	ALL	170/77
Ethylene Glycol	100	200/93	100	90/32	Sodium Hydroxide	25	180/82	N/R	N/R
Ferric Chloride	ALL	210/99	ALL	170/77	Sodium Nitrate	ALL	210/99	ALL	170/77
Ferrous Chloride	ALL	210/99	ALL	170/77	Sodium Sulphate	ALL	210/99	ALL	170/77
Formaldehyde	ALL	150/65	50	75/24	Stannic Chloride	ALL	210/99	ALL	160/21
Gasoline	100	180/82	100	90/32	Sulphuric Acid	75	100/38	25	75/24
Glucose	100	210/99	100	170/77	Tartaric Acid	ALL	210/99	ALL	170/77
Glycerine	100	210/99	100	150/66	Vinegar	100	210/99	100	170/77
Hydrobromic Acid	50	150/65	50	120/49	Water - Distilled	100	180/82	100	170/77
Hydrochloric Acid	37	150/65	37	75/24	Zinc Nitrate	ALL	210/99	ALL	170/77
Hydrogen Peroxide	30	150/65	5	100/38	Zinc Sulphate	ALL	210/99	ALL	170/77
Lactic Acid	ALL	210/99	ALL	170/77					

ALL - All Concentrations      SAT - Saturated Solution      N/R - Not Recommended.

The corrosion resistance data listed above is for general information only.

Resin manufacturers have provided test data which indicates the specific resin can withstand the corrosion conditions listed above. Webforge believes the data to be true and accurate but no guarantee is expressed or implied as to specific performance. Testing for specific environments is recommended.

## FRP Grating Load/Deflection Table

Product	Load Bar Size	Mass kg/m <sup>2</sup>	U = kPa	Span mm					4kPa 5mm Defl span	
				450	600	750	900	1200		
G256***	25 x 6	12.1	2.5	0.27	1.03	2.58	6.15	15.51	750mm	
				3.0	0.33	1.25	3.1	7.6		18.61
				4.0	0.44	1.67	4.48	9.64		
				5.0	0.55	2.37	5.17	11.97		
				7.5	0.94	3.11	7.76	17.48		
				10.0	1.1	4.15	10.34			
G386***	38 x 6	18.6	3.0	0.1	0.27	0.98	1.68	4.7	1050mm	
				0.12	0.32	1.4	2.03	5.64		
				0.17	0.43	1.71	2.7	7.52		
				0.21	0.53	2.02	3.38	9.4		
				0.31	0.8	2.81	5.06	14.1		
				0.41	1.06	3.59	6.75	18.8		
			15.0	0.63	1.6	5.16	10.13			

Note: Where \*\*\* indicates Material. Top Surface. Treatment/Colour. See options page 8.

Recommended minimum landing equal to grating depth but = >25mm.