Chemical Resistance Guide

Chemical Environment	Concentration %	Temp °C	Moulded Fibergrate								
			ViCORR	Super ViCORR	IFR	FGI	Corvex	XFR	FS-25	CP-84	VE-25
ACETIC ACID	50	MAX	C	C	C	C	C	I	C	C	C
ACETONE	100	24	S	S	I	I	T	I	I	I	S
ALCOHOLS	100	49	C	C	I	I	I	S	I	I	C
ALUM	ALL	MAX	C	C	C	C	C	C	C	C	C
ALUMINIUM CHLORIDE	ALL	MAX	C	C	C	C	C	C	C	C	C
ALUMINIUM FLUORIDE	20	24	C	C	I	I	I	I	I	I	C
ALUMINIUM HYDROXIDE	30	24	C	C	N	N	N	N	N	I	C
AMMONIUM SALTS-NEUTRAL	All	49	C	C	C	C	S	S	I	I	S
AMMONIUM SALTS-AGGRESSIVE	ALL	24	S	C	I	I	T	I	I	I	S
AROMATIC SOLVENTS	ALL	24	T	T	N	N	N	N	N	N	T
BARIUM SALTS	ALL	MAX	C	C	C	C	C	C	C	C	C
BENZEN	100	60	I	S	I	I	N	I	I	I	I
BLACK LIQUOR (Pulp Mill)	All	MAX	C	C	I	I	N	I	I	I	C
BLEACH LIQUOR (Pulp Mill)	ALL	MAX	C	C	I	I	N	N	I	I	C
CALCIUM HYDROXIDE	25	MAX	C	C	S	S	I	I	S	S	C
CALCIUM HYPOCHLORITE	ALL	MAX	C	C	I	I	N	I	I	I	C
CALCIUM SALTS	ALL	MAX	C	C	C	C	C	C	C	C	C
CARBON TETRACHLORIDE	100	24	C	C	I	I	N	S	N	I	C
CHLORINATED HYDROCARBONS	100	24	T	T	T	T	T	N	N	N	T
CHLORINE DIOXIDE	SAT	60	C	C	N	N	N	N	N	T	C
CHLORINE WATER	SAT	49	C	C	I	I	T	I	I	I	C
CHLORINE, Wet	SAT	MAX	C	C	N	N	N	N	N	N	C
CHLOROBENZENE	100	24	S	S	N	N	N	N	N	N	S
CHLOROBENZENE	ALL	Up to 38	C	C	N	N	N	N	N	N	C
CHLOROFORM	100	24	N	N	N	N	N	N	N	N	N
CHROMIC ACID	50	60	S	S	S	S	N	N	I	S	S
CITRIC ACID	ALL	MAX	C	C	C	C	C	C	I	C	C
COPPER CYANIDE PLATING	All	52	C	C	S	S	I	N	S	S	C
COPPER SALTS	ALL	MAX	C	C	C	C	C	C	C	C	C
CRUDE OIL (Sweet or Sour)	ALL	MAX	C	C	C	C	C	C	C	C	C
DICHLOROBENZENE	100	24	T	S	N	N	N	N	N	N	T
ETHERS		24	T	T	N	N	N	N	N	N	T
FERRIC CHLORIDE	100	MAX	C	C	C	C	C	C	I	C	C
FERRIC SALTS	ALL	MAX	C	C	C	C	C	C	C	C	C
FLUORIDE SALTS+HCL	ALL	24	C	C	S	S	N	I	S	S	C
FLUOSILICIC ACID	10	24	C	C	S	S	S	S	S	S	C
FORMALDEHYDE	37	66	C	C	I	I	I	I	I	I	C
FORMIC ACID	25	38	C	C	S	S	I	I	I	S	C
FUEL (Diesel, Jet, Gasoline)	ALL	38	C	C	C	C	C	C	C	C	C
GLYCERINE	100	MAX	C	C	C	C	C	C	C	C	C
GREEN LIQUOR (Pulp Mill)	ALL	MAX	C	C	N	N	N	N	N	I	C
HYDROBROMIC ACID	48	MAX	S	S	S	S	I	I	I	S	S
HYDROCHLORIC ACID	10	MAX	C	C	S	S	S	C	S	S	C
HYDROCHLORIC ACID	30	MAX	CS	C	S	S	I	I	S	S	C
HYDROCHLORIC ACID (Concentrated)	ALL	Up to 82	I	C	N	N	N	N	N	N	I
HYDROCYANIC ACID	ALL	MAX	C	C	I	I	I	I	I	I	C
HYDROFLUORIC ACID	20	24	S	C	N	N	N	N	N	N	S
HYDROGEN PEROXIDE	30	24	C	C	N	N	N	I	N	N	C
LACTIC ACID	100	MAX	C	C	C	C	C	C	C	C	C
LIME SLURRY	SAT	MAX	C	C	C	C	C	C	C	C	C
LITHIUM SALTS	ALL	MAX	C	C	C	C	C	C	C	C	C
MAGNESIUM SALTS	All	MAX	C	C	C	C	C	C	C	C	C
MALEIC ACID	100	MAX	C	C	S	S	I	C	I	S	C
MERCURY CHLORIDE	100	MAX	C	C	C	C	C	C	S	C	C
NICKEL SALTS	ALL	MAX	C	C	C	C	C	C	C	C	C
NITRIC ACID	20	49	C	C	S	S	I	I	S	S	C
NITRIC ACID	35	38	C	C	N	N	N	I	N	I	C
NITRIC ACID	40	Ambient	I	C	N	N	N	N	N	N	I
NITRIC HYDROFLUORIC	20.02	24	I	C	N	N	N	N	N	N	I
NITROUS ACID	10	24	C	C	C	C	C	C	I	C	C
OZONE For SEWERAGE TREATMENT		38	C	C	C	C	C	C	C	C	C
PERCHLOROETHYLENE	100	24	S	C	N	N	N	I	N	N	S
PHENOL	10	24	C	C	N	N	N	N	N	N	C
PHENOL	88	Ambient	S	C	N	N	N	N	N	N	S
PHOSPHORIC ACID	85	MAX	C	C	C	C	S	C	I	C	C
PHOSPHORIC ACID, Super	115	MAX	C	C	I	I	T	S	N	I	C
POTASSIUM HYDROXIDE	10	49	C	C	I	I	N	N	I	I	C
POTASSIUM SALTS	ALL	MAX	C	C	C	C	C	C	C	C	C
SILVER NITRATE	100	MAX	C	C	C	C	C	C	I	C	C
SODIUM CYANIDE	ALL	24	C	C	I	I	I	I	I	I	C
SODIUM HYDROXIDE	50	MAX	C	C	I	I	N	N	I	I	C
SODIUM HYDROXIDE	10	MAX	C	C	N	N	N	N	N	N	C
SODIUM HYPOCHLORITE (Stable)	10	38	C	C	S	S	I	S	S	S	C
SODIUM SALTS - Neutral	ALL	MAX	C	C	C	C	C	C	C	C	C
SODIUM SALTS - Aggressive	ALL	24	S	C	I	I	T	I	N	I	S
SULFUR DIOXIDE	SAT	MAX	C	C	S	S	S	S	S	S	C
SULFURIC ACID	25	MAX	C	C	S	S	I	S	S	S	C
SULFURIC ACID	50	MAX	C	C	S	S	N	S	I	S	C
SULFURIC ACID	75	38	C	C	I	I	N	I	N	I	C
TOLUENE	100	49	S	C	I	I	N	N	I	I	S
TRICHLOROETHANE 1,1,1	ALL	24	S	C	I	I	N	I	N	I	S
TRISODIUM PHOSPHATE	50	MAX	C	C	I	I	I	I	I	I	C
WATER (Fresh, Salt, Moderate D.L)	100	MAX	C	C	C	C	C	C	C	C	C
WET CHLORINE/Hydrochloric Acid	10-20		S	C	N	N	N	N	N	N	S
WHITE LIQUOR (Pulp Mill)	ALL	MAX	C	C	I	I	N	I	I	I	C
ZINC PLATING	All	24	C	C	S	S	N	S	I	S	C
ZINC SALTS	100	MAX	C	C	C	C	C	C	C	C	C

C - Continuous exposure of the grating to the Chemical Environment 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 or washed from the grating.

N - Not recommended for the concentrations and temperatures listed.

T - Test.

Yellow shaded resin systems are available in various panel sizes Ex. Stock subject to prior sale

MAX TEMP is 204°C for Super ViCORR, 82°C for ViCORR and VE-25, 66°C for IFR, FGI, XFR, FS-25 and CP-84, 60°C for Corvex.

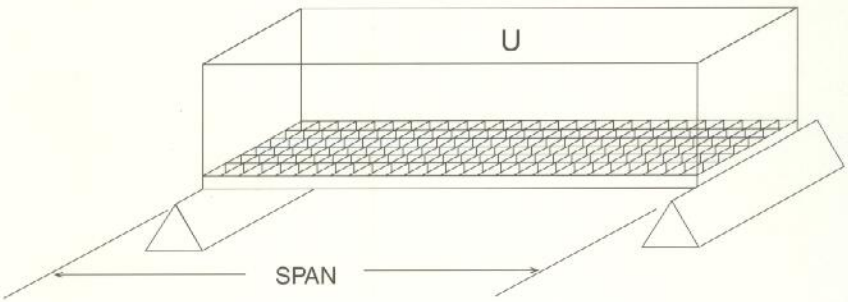
The information in this Corrosion Guide is correct to the best of Fibergrate's knowledge. It is based on extensive experience with fibreglass grating in corrosive applications.

Because actual use conditions differ and mixtures of corrosives will occur in service, the end user must test for use under actual conditions.

Fibergrate's responsibility for claims arising from breach of warranty, negligence or otherwise is limited to the purchase price of the material sold by Fibergrate.

Fibergrate
Structural Systems

Load Tables – Fibergrate Resins



MOULDED GRATING UNIFORM LOAD TABLES = Deflection in Millimetres												MAX RECOMMENDED RESIN SYSTEM			ULTIMATE CAPACITY
CLEAR SPAN	STYLE		LOADS = kg/m^2												
	DEPTH	MESH										CORVEX	IFR	ViCORR	
(mm)	(mm)	(mm x mm)	250	350	500	750	1000	1500	2500	5000	10000	ELS	FGI	XFR	
300	25	25 x 100	0.25	0.25	0.25	0.25	0.25	0.26	0.53	1.29	2.34	11557	11557	22596	49581
	25	38 x 38	0.25	0.25	0.25	0.25	0.27	0.53	1.04	2.08	4.16	7714	7714	15062	33054
	38	38 x 38	0.25	0.25	0.25	0.25	0.25	0.26	0.52	1.03	1.82	10092	13832	37594	50875
	50	50 x 50	0.25	0.25	0.25	0.25	0.25	0.25	0.26	0.52	1.04	12206	30598	30598	46988
450	25	25 x100	0.25	0.30	0.51	0.77	1.04	1.79	2.82	5.63	11.27	5136	5136	10043	23221
	25	38 x 38	0.50	0.60	1.02	1.54	2.04	2.83	5.11	9.73	-	3427	3427	6694	15477
	38	38 x38	0.25	0.25	0.26	0.52	0.76	1.03	1.79	3.59	7.17	4487	6147	16708	33918
	50	50 x 50	0.25	0.25	0.25	0.27	0.51	0.76	1.03	2.30	4.35	5424	13597	13597	31325
600	25	25 x100	1.02	1.34	1.80	2.82	3.83	5.63	9.46	18.68	-	2890	2890	5649	13060
	25	38 x 38	1.54	2.19	3.08	4.86	6.39	9.49	16.37	-	-	1929	1929	3764	8705
	38	38 x38	0.52	0.80	1.02	1.50	1.57	3.08	5.37	10.75	-	2524	3457	9399	19530
	50	50 x 50	0.25	0.30	0.51	0.77	1.02	1.54	2.56	5.12	-	3052	7651	7651	23494
750	25	25 x100	2.06	3.04	4.36	6.64	8.70	13.06	21.76	-	-	1850	1850	3613	8359
	25	38 x 38	3.58	4.93	6.92	10.50	14.07	20.99	-	-	-	1235	1235	2412	5571
	38	38 x38	1.27	1.64	2.31	3.57	4.61	6.92	11.77	23.30	-	1616	2212	6015	12499
	50	50 x 50	0.52	0.85	1.27	1.79	2.31	3.58	5.88	11.52	-	1953	4897	4897	16327
900	25	25 x100	4.10	5.78	8.21	12.54	16.64	24.84	41.24	-	-	1284	1284	2510	5805
	25	38 x 38	7.93	11.06	15.88	23.82	31.75	47.38	-	-	-	859	859	1675	3872
	38	38 x38	2.56	3.59	5.12	7.68	10.23	15.12	25.36	-	-	1123	1538	4179	8681
	50	50 x 50	1.04	1.64	2.30	3.34	4.60	6.67	11.27	-	-	1357	3398	3398	11337
1050	25	25 x100	8.45	11.85	16.89	25.34	33.79	50.68	-	-	-	942	942	1846	4262
	25	38 x 38	12.55	17.62	25.10	37.88	50.43	-	-	-	-	630	630	1230	2842
	38	38 x38	4.35	6.07	8.71	13.30	17.66	26.37	44.03	-	-	825	1128	3071	6376
	50	50 x 50	2.04	2.79	4.10	6.14	8.18	12.04	20.22	-	-	996	2500	2500	8329
1150	25	25 x100	12.28	17.08	24.32	36.38	48.66	72.99	-	-	-	786	786	1538	3554
	25	38 x 38	19.72	27.59	39.44	59.16	78.88	-	-	-	-	527	527	1025	2368
1200	38	38 x38	7.18	10.15	14.34	21.74	28.92	43.49	-	-	-	630	864	2348	4882
	50	50 x 50	3.58	4.97	7.16	10.75	14.33	21.49	-	-	-	762	1914	1914	6376
1350	38	38 x 38	10.76	15.13	21.51	32.48	43.01	64.75	-	-	-	498	684	1855	3857
	50	50 x 50	5.37	7.46	10.75	16.12	21.50	32.25	-	-	-	601	1509	1509	5039
1500	50	50 x 50	9.45	12.99	18.70	28.15	37.38	-	-	-	-	488	1225	1225	4082

NOTES:

1. In some cases where 0.25mm deflection is recorded, the actual value may be less.
2. Grating not shown and / or spans not listed have not been tested.
3. Ultimate loads have not been determined