

## CHEMICAL RESISTANCE CHART

E - Excellent Resistance at Room Temperatures

F - Fair Resistance at Room Temperatures

U - Poor Resistance

	XX Paper Base Phenolic	C/CE/LE Cotton Reinforced Phenolic	HT-G3 Fiber Glass Phenolic	G3 Fiber Glass Phenolic	G7 Fiber Glass Silicone	G10 Fiber Glass Epoxy	G11 Fiber Glass Epoxy
Typical Tensile Str. (psi)	16,000	11,000	48,000	23,000	20,000	48,000	48,000
Typical Flex. Str. (psi)	18,000	18,000	50,000	35,000	20,000	55,000	55,000
Water Absorption % 24 Hours 1/2" thick	0.55	1	0.7	1.5	0.2	0.1	0.1
Maximum Operating Temperature	175°F	225°F	450°F	350°F	400°F	250°F CRYO	350°F CRYO
Sulphuric Acid 30%	U	F	E	E	U	U	F
Sulphuric Acid 3%	F	E	E	E	E	F	E
Sodium Hydroxide 15%	U	U	U	U	U	F	F
Anhydrous Liquid Ammonia	U	U	U	U	U	U	U
* Aliphatic Hydrocarbons	E	E	E	E	E	E	E
** Aromatic Hydrocarbons	E	E	E	E	U	E	E
Transformer Oils	E	E	E	E	E	E	E

\* Examples: Alcohol, Ketones | \*\* Examples: Benzol, Toluol

All technical advise and recommendation are rendered by Seller free of charge.

While based on data believed to be reliable, seller assumes no responsibility.

## CHEMICAL RESISTANCE

Two typical commercial chemicals at 75°F and 1000 hours continuous immersion

Chemical	Effect on Laminate
<b>Acids</b>	
Boric(conc), Citric(conc), Formic(conc), Oxalic(conc), Acetic(10%)	No Effect
Nitric(10%), Sulphuric(10%), Hydrochloric(10%)	Some Swelling
Nitric(20%), Sulphuric(20%)	Swelling and Delamination
<b>Alkalies</b>	
5% Sodium Hydroxide, 5% Potassium	Some Swelling
20% Sodium Hydroxide	Considerable Swelling
<b>Salt Solutions – 10% or 20%</b>	
Zinc Chloride, Nickel Sulphate, Sodium Sulphate, Sodium Sulphite, Sodium Nitrate, Sodium Carbonate	No Effect
<b>Solvents</b>	
Benzol, Carbon Tetrachloride, Acetone, Mineral Spirits, Perclene, Gasoline, Askarol, Inerteen, Ethyl Alcohol	No Effect

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