

CORROSION RESISTANCE GUIDE

The corrosion guidelines tests were performed by analyzing phenolic conduit coupons for 30 days in the chemical vapors at the temperature shown. It has been shown that **CHAMPION FLAME SHIELD®** can often be used for chemicals listed as “Not Recommended” (NR). Real cases often are limited to fumes, vapors and occasional splashes at the temperatures indicated.

This information is provided solely as a guide since it is impossible to anticipate all individual site conditions. For specific applications which are not covered in this guide (may require screening tests), consultation with Champion Fiberglass, Inc. is recommended.

Chemical	Concentration	Vapor °F	Vapor °C	Chemical	Concentration	Vapor °F	Vapor °C
Acetic Acid	All	140	60	Heavy Aromatic Naphtha (HAN)	100	150	66
Acetic Acid, Glacial	All	150	66	Hydrochloric Acid	37	120	49
Acetone	All	80	27	Hydrogen Chloride (Gas)	—	180	82
Aluminum Chloride	All	180	82	Hydrogen Sulfide (Gas)	—	180	82
Aluminum Hydroxide (1)	All	120	49	Isopropyl Alcohol	All	125	52
Aluminum Sulphate	All	250	121	Magnesium Hydroxide (1)	All	120	49
Ammonia Aqueous (1)	10%	NR	NR	Methyl Alcohol (Methanol)	100	125	52
Ammonium Bicarbonate (1)	All	150	66	Methyl Ethyl Ketone	100	80	27
Ammonium Chloride	All	150	66	Naphtha	All	(*)	(*)
Ammonium Hydroxide (1)	All	NR	NR	Nitric Acid	—	(*)	(*)
Ammonium Phosphate	All	150	66	Perchloroethylene	All	80	27
Benzene	100	150	66	Phenol (Carbolic Acid)	All	100	38
Benzyl Alcohol	100	125	52	Phosphoric Acid	All	150	66
Benzyl Chloride	All	150	66	Potassium Carbonate (1)	All	120	49
Calcium Chloride	All	150	66	Potassium Permanganate	All	150	66
Calcium Hydroxide (1)	All	120	49	Sodium Bicarbonate (1)	All	150	66
Calcium Hypochlorite	All	(*)	(*)	Sodium Carbonate (1)	All	150	66
Carbon Dioxide Gas	—	250	121	Sodium Chloride	All	150	66
Carbon Tetrachloride	100	150	66	Sodium Hydroxide (1)	All	(*)	(*)
Chlorine (Liquid)	All	NR	NR	Sodium Hypochlorite	All	250	121
Chlorobenzene	100	150	66	Sodium Sulfate	All	150	66
Chloroform	100	150	66	Sodium Tripolyphosphate	100	150	66
Chloroethylene	100	150	66	Styrene	All	150	66
Chlorotoluene	100	150	66	Sulfur Dioxide	All	NR	NR
Citric Acid	30	120	49	Sulfuric Acid	93	150	66
Ethyl Alcohol (Ethanol) (Denaturated)	100	150	66	Sulfurous Acid 25% min.	All	150	66
Ethylene Glycol	100	180	82	Toluene	100	150	66
Furfuryl Alcohol	100	125	52	Trichloroethylene	All	120	49
Glycol	100	180	82	Xylene	100	150	66

NR = Not Recommended (*) - Contact Champion Fiberglass

[1] - All alkaline materials will attack phenolics to some extent. Resistance is dependent upon humidity of the environment. Material is conditionally recommended for continuous exposure to dry vapor only with occasional wetting. Duct system must be designed to eliminate condensation or pooling. If condensates can be expected from vapors, contact Champion Fiberglass.

Information in this table is based on data supplied by raw material suppliers and collected from many years of similar industrial applications.

Temperatures represent standard test conditions and are not minimums or maximums. **CHAMPION FLAME SHIELD®** products may be acceptable at other temperatures for some chemicals, but should be tested to determine specific suitability.

The recommendations or suggestions contained in this table are made without guarantee or representation as to results. We suggest that you evaluate these recommendations and suggestions in your own laboratory or field trial prior to use.

