

Corrosion Resistance Guide

The corrosion guidelines tests were performed by immersing coupons for 30 days in the chemical at the temperature shown. This is a very severe test. It has been shown that CHAMPION STRUT® 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. Polyester is the standard resin used in the CHAMPION STRUT System, however a vinylester resin system is also available.

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, and may require screening tests to evaluate resin system suitability, consultation with the factory is recommended.

Chemical	75° F (24° C)	150° F (66° C)	Chemical	75° F (24° C)	150° F (66° C)
Acetic Acid 15%	P	P	Lithium Chloride, Sat'd	P	P
Acetic Acid 50%	P	V	Magnesium Salts	P	P
Acetic Acid (Glacial)	NR	NR	Mercuric Chloride	P	P
Acetone	V*	NR	Mercurous Chloride	P	P
Aluminum Chloride	P	P	Mercury	P	P
Aluminum Hydroxide	P	V	Methyl Alcohol	P	NR
Aluminum Potassium Sulphate	P	P	Methyl Ethyl Ketone	NR	NR
Aluminum Sulphate	P	P	Mineral Oils	P	P
Ammonia, Dry Gas	P	P	Naphtha	P	P
Ammonia, Liquid	NR	NR	Nickel Salts	P	P
Ammonium Chloride, Sat'd	P	P	Nitric Acid, 0-10%	P	V
Ammonium Hydroxide 20%	P*	V	Nitric Acid >10%	NR	NR
Ammonium Nitrate, Sat'd	P	P	Oleic Acid	P	P
Ammonium Sulfate, Sat'd	P	P	Oxalic Acid	P	P
Amyl Alcohol	P*	V*	Perchloroethylene	P	P
Benzene	P	NR	Phenol, 0-2%	V	NR
Benzene Sulfonic Acid 30%	P	V	Phenol, >2%	NR	NR
Benzoic Acid, Sat'd	P	P	Phosphoric Acid	P	P
Butyl Alcohol, Normal	P	NR	Potassium Carbonate, 0-15%	P	V
Calcium Salts	P	P*	Potassium Carbonate, 15-Sat'd	NR	NR
Carbon Disulfide	NR	NR	Potassium Hydroxide	V	NR
Carbonic Acid, Sat'd	P	P	Potassium Permanganate	P	V
Carbon Tetrachloride	P*	P*	Potassium Persulfate	V	NR
Chlorine, Dry Gas	P	P	Potassium Salts	P	P
Chlorine, Wet Gas	V	V	Silver Nitrate	P	P
Chlorine Dioxide	P*	V*	Sodium Bicarbonate	P	P
Chlorine Water	P	P*	Sodium Bisulfate	P	P
Chlorobenzene	NR	NR	Sodium Carbonate	P	V
Chromic Acid 5%	P	V*	Sodium Chloride	P	P
Citric Acid, Sat'd	P	P	Sodium Dichromate	P	V
Copper Sulfate	P	P	Sodium Hydroxide	V	NR
Crude Oil, Sour	P	P	Sodium Hypochlorite, 0-5%	P	V
Diesel Fuel	P	P	Sodium Hypochlorite, 5-10%	V	V
Ethyl Alcohol	NR	NR	Sodium Hypochlorite, >10%	V	NR
Ethylene Glycol	P	P	Sodium Nitrate	P	P
Fatty Acids	P	P	Sodium Silicate <6%	V	V
Ferric Salts	P	P	Sodium Sulfate	P	P
Ferrous Sulfate	P	P	Sodium Sulfide	V	V
Fluoboric Acid, Sat'd	P	V	Sodium Thiosulfate	V	NR
Fluosilicic Acid 0-35%	V	V*	Styrene	NR	NR
Formic Acid, Vapor	P	P	Sulfure Dioxide, Dry or Wet Gas	P	P
Fuel Oil	P	P	Sulfuric Acid, Vapor	P	P
Gasoline	P	P*	Sulfurous Acid	V	NR
Glycerine	P	P	Tannic Acid	P	P
Hydrochloric Acid 0-10%	P	P	Tartaric Acid	P	P
Hydrochloric Acid 10-36%	P	V*	Toluene	NR	NR
Hydrofluoric Acid	NR	NR	Trisodium Phosphate	V	V
Hydrogen Chloride, Dry or Wet Gas	P	V	Water, City	P	P
Hydrogen Peroxide	NR	NR			
Hydrogen Sulfide, Dry or Wet Gas	P	V			
Kerosene	P	P			
Lactic Acid	P	P			
Lime Slurry, Sat'd	P	P			

P - Polyester resin system
V - Vinylester resin system
NR - not recommended
* - some limitations apply - consult the factory

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 STRUT 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.