

# CHEMICAL RESISTANCE CHART

REAGENT INVOLVED	PAINT SYSTEM				
	NON-COATED 3003 ALLOY ALUMINIUM	AIR DRIED ALKYD ENAMEL	BAKED EPOXY	SYNTHETIC RESIN (EISENHEISS)	PHENOLIC (HERESITE)
MAXIMUM TEMPERATURE	300°F	200°F	250°F	300°F	140°F
ABRASION (DRY)	U	S	S	F	F
MOISTURE (WATER)	S	S	S	S	S
SATURATED STEAM	S	S	S	S	U
SALT SPRAY	L	L	S	S	F
ACETIC ACID	L	S	S	S	F
ACETONE	S	U	S	U	F
ALCOHOLS	S	S	S	S	F
ALUMINUM CHLORIDE	U	S	S	S	F
ALUMINUM SULPHATE	U	S	S	S	F
AMMONIA GAS	N	S	S	N	N
AMMONIUM CHLORIDE	U	S	S	F	F
AMMONIUM HYDROXIDE	F	S	S	F	U
AMMONIUM NITRATE	F	N	S	S	L
AMMONIUM SULPHATE	U	S	S	S	L
BENZENE	S	N	S	U	F
BLEACHING COMPOUNDS	N	F	N	N	N
BORIC ACID	U	S	S	S	F
BROMINE	L	S	F	N	N
BUTANOL	N	N	S	S	F
BUTYRIC ACID	F	N	S	N	N
CALCIUM CARBONATE	S	S	S	N	N
CALCIUM CHLORIDE, WET	U	N	N	F	F
CALCIUM CHLORIDE, DRY	U	S	S	S	F
CALCIUM HYDROXIDE	U	S	S	F	F
CALCIUM HYPOCHLORITE	U	N	N	S	U
CARBOLIC ACID	F	U	F	U	F
CARBON DISULPHIDE	S	U	S	U	F
CARBON MONOXIDE	S	S	S	N	N
CARBON TETRACHLORIDE	L	U	S	U	F
CARBONIC ACID	F	S	S	S	F
CHLORINE, WET OR HOT	U	N	F	N	N
CHLORINE, DRY	U	S	S	S	F
CHLOROBENZENE	N	N	N	N	F
CHLOROFORM	F	F	S	N	N
CHROMIC ACID	U	S	F	F	U
CITRIC ACID	L	S	S	S	F
COPPER SULPHATE	U	N	N	S	F
ETHANOL	N	N	S	S	F
ETHYL ACETATE	N	N	S	F	F
ETHYLENE DICHLORIDE	N	N	F	F	F
ETHYLENE GLYCOL	F	N	N	F	F
FERRIC CHLORIDE	U	N	N	S	F
FERRIC SULPHATE	U	N	N	S	F

REAGENT INVOLVED	PAINT SYSTEM				
	NON-COATED 3003 ALLOY ALUMINIUM	AIR DRIED ALKYD ENAMEL	BAKED EPOXY	SYNTHETIC RESIN (EISENHEISS)	PHENOLIC (HERESITE)
MAXIMUM TEMPERATURE	300°F	200°F	250°F	300°F	140°F
FORMALDEHYDE	F	N	S	N	F
FORMIC ACID	U	F	N	N	F
GASOLINE	F	S	S	S	F
HYDROBROMIC ACID	L	S	F	N	N
HYDROCHLORIC ACID	U	S	F	S	F
HYDROCHLORUS ACID	L	S	F	N	N
HYDROFLUORIC ACID	U	U	F	U	U
HYDROGEN PEROXIDE	F	S	S	F	U
HYDROGEN SULPHIDE	L	N	S	F	F
LACQUER SOLVENTS	S	U	S	N	N
LACTIC ACID	U	S	L	S	F
LINSEED OIL	N	N	S	S	S
METHANOL	N	N	F	F	F
METHYL ETHYL KETONE	S	N	S	U	F
METHYL ISOBUTYL KETONE	S	N	F	U	F
MINERAL SPIRITS	N	N	S	F	F
NITRIC ACID	U	S	S	F	U
NITROUS ACID	F	S	S	N	N
OLEIC ACID	S	S	S	N	N
PETROLEUM ETHER	N	N	F	F	F
PHOSPHORIC ACID	U	S	S	S	F
POTASSIUM ALUM	N	N	N	S	F
POTASSIUM CYANIDE	L	S	S	N	N
POTASSIUM HYDROXIDE	U	S	S	F	U
POTASSIUM DICHROMATE	N	N	N	N	F
POTASSIUM NITRATE	N	N	S	N	N
PYROGALLIC ACID	F	N	S	N	N
SODIUM BISULPHATE	L	N	N	S	F
SODIUM CHLORIDE	L	N	S	S	F
SODIUM CYANIDE	L	S	S	N	N
SODIUM HYDROXIDE	U	S	S	F	U
SODIUM HYPOCHLORITE	U	N	N	F	U
SODIUM SULPHATE	S	N	N	S	F
SULPHURIC ACID	U	S	S	F	F
SULPHUROUS ACID	L	S	S	S	F
SULPHUR DIOXIDE	U	S	S	F	F
SULPHUR TRIOXIDE	U	L	S	N	N
TANNIC ACID	L	S	S	S	S
TOLUENE	S	U	S	U	F
TRICHLOROETHYLENE	F	N	S	U	F
VINEGAR	L	N	N	S	U
XYLOL	S	U	S	F	F

S - Suitable for heavy concentrations of fumes, including splash or condensation.

F - Suitable for mild concentrations of fumes, but no splash or condensation.

L - Suitable for light corrosion service, or intermittent exposure to light fume concentration. Not suitable if moisture, splash or condensation are present.

U - Unsatisfactory for use against corrosive agent listed.

N - No data available.

**NOTE:** Data presented is a summary of corrosion resistance characteristics of aluminum and the four coating systems shown. While single "letter" rating and a single temperature cannot possibly describe all situations, this data is presented as a guide. Caution must be exercised where moisture and/or temperature along with a chemical reagent will be encountered.