



C. E. Shepherd Company

**TECHNICAL BULLETIN - Chemical Resistance Chart**

**SHEPHERD FUSE BONDED PVC COATED WIRE MESH**

CHEMICAL	VINYL C	RATING H	CHEMICAL	VINYL C	RATING H
<b>ACIDS:</b>			<b>ACID SALTS:</b>	E	E
ACETIC 10%	F	N	ALUMINUM SULFATE	E	E
ACETIC GALCIAL	N	N	AMMONIUM CHLORIDE*	E	E
BENZENE SULFONIC 10%	E	E	COPPER CHLORIDE*	E	E
BENZOIC	E	E	IRON CHLORIDE*	E	E
BORIC	E	E	NICKEL CHLORIDE*	E	E
BUTYROC 100%	G	N	ZINC CHLORIDE*	E	E
CHLORACETIC 10%	F	N	<b>ALKALINE SALTS:</b>		
CHROMIC 5%	E	G	BARIUM SULFIDE	E	E
CITRIC 10%	E	E	SODIUM BICARBONATE	E	E
FATTY ACIDS	E	F	SODUM CARBONATE	E	E
FLUOSILICIC	E	E	SODIUM SULFIDE	E	E
FORMIC 90%	F	N	TRISODIUM PHOSTHATE	E	E
HYDROBROMIC 20%	E	E	<b>NEUTRAL SALTS:</b>		
HYDROCHLORIC 20%	E	E	CALCIUM CHLORIDE*	E	E
HYDROCYANIC	E	E	MAGNESIUM CHLORIDE*	E	E
HYDROFLUORIC 20%	E	E	POTASSIUM CHLORIDE*	E	E
HYPOCHLOROUS 5%	E	E	SODIUM CHLORIDE*	E	E
LACTIC 5%	E	E	<b>SOLVENTS:</b>		
MALEIC 25%	G	F	ALCOHOLS	E	E
NITRIC 5%	E	E	ALIPHATIC HYDROCARBONS	F	P
NITRIC 30%	E	F	AROMATIC HYDROCARBONS	P	N
OLEIC	E	F	CHLORINATED HYDROCARBONS	N	N
OXALIC	E	E	KETONES	N	N
PHOSPORIC	E	E	ETHERS	N	N
PICRIC	P	N	ESTERS	N	N
STEARIC	E	F	GASOLINE	E	F
SULFURIC 50%	E	E	CARBON TETRACHLORIDE	N	N
SULFURIC 80%	E	G	<b>ORGANICS:</b>		
TANNIC	E	G	ANILINE	N	N
<b>ALKALIES:</b>			BENZENE	P	N
AMMONIUM HYDROXIDE	E	E	FORMALDEHYDE 37%	E	E
CALCIUM HYDROXIDE	E	E	PHENOL 5%	N	N
POTASSIUM HYDROXIDE	E	E	MINERAL OILS	P	P
SODIUM HYDROXIDE	P	P	VEGETABLE OILS	F	F
			CHLOROENZENE	N	N

**KEY**

E = EXCELLENT: NO ATTACK  
 G = GOOD: APPRECIABLY NO ATTACK  
 F = FAIR: SOME ATTACK BUT USABLE IN SOME INSTANCES  
 P = POOR: ATTACKED, NOT RECOMMENDED  
 N = NO: RAPIDLY ATTACKED

C = COLD: 70° F  
 H = HOT: 180° F FOR BOILING POINT OF SOLVENT  
 \* = ALSO NITRATES AND SULFATES

The typical results reported are believed to be based on reliable procedures. Due to variable conditions or methods of processing, no guarantees or warranties are expressed or implied, nor are recommendations to infringe on any patents.



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## TECHNICAL BULLETIN Corrosion Comparison

### SHEPHERD PERFORMANCE TESTED COOLING TOWER COMPONENTS

<u>ELEMENT</u>	<u>PVC</u>	<u>FRP (GRP)</u>	<u>304SS</u>
ALCOHOL METHYL 10%	R	NR	R
ALCOHOL – ETHYL 10%	R	NR	R
AMMONIUM HYDROXIDE 20%	R	ER	R
CALCIUM CHLORIDE	R	R	R
FRUIT JUICE	R	R	R
FUEL OILS	R	R	R
GASOLINE	SA	SA	R
HYDROCHLORIC ACID 20%	R	R	NR
SODIUM CHLORIDE 5%	R	R	R
SULFURIC ACID 15%	R	R	SA

#### KEY

R = RESISTANT

SA = SOME ATTACK

NR = NOT RESISTANT

TEMPERATURE CONSIDERED AT 72° F 120°F

The typical results reported are believed to be based on reliable procedures