Chemical Resistance Guide

CHEMICAL/SOLUTION	Santoprene®	Tygothane®	PVC	LDPE
Acetic Acid 20%	A	B	B	A
Acetic Acid 30%	B	C	C	A
Acetic Acid, Glacial	C	C	C	C
Acetic Anhydride	B	C	C	C
Acetone	B	C	C	C
Alcohol	B	C	A	B
Aliphatic Hydrocarbons	B	B	B	B
Aluminum Chloride	A	A	A	B
Aluminum Sulfate	A	A	A	A
Alums	A	A	A	A
Ammonium Acetate	B	B	A	A
Ammonium Carbonate	A	A	A	A
Ammonium Chloride	A	B	A	B
Ammonium Hydroxide	A	B	A	A
Ammonium Nitrate	A	A	A	A
Ammonium Phosphate	A	A	A	A
Ammonium Sulfate	A	A	A	A
Amyl Acetate	A	C	C	C

CHEMICAL/SOLUTION	Santoprene®	Tygothane®	PVC	LDPE
Amyl Alcohol	B	B	B	C
Aniline	B	C	C	C
Antimony Salts	A	A	A	B
Arsenic Salts	A	A	A	B
Barium Hydroxide	A	A	A	B
Barium Salts	A	*	A	B
Beer	A	A	A	A
Benzene	C	C	C	C
Benzoic Acid	A	C	A	A
Benzyl Alcohol	B	C	B	C
Bleach 5.25%	A	A	A	A
Boric Acid	A	A	A	A
Bromine	A	B	B	B
Butanol	B	*	B	B
Butyl Acetate	A	C	C	C
Butyric Acid	A	C	B	C
Calcium Chloride	A	A	B	A
Calcium Hydroxide	A	C	A	A

Ratings Key – Chemical Effect

A = Fluid has minor or no effects
B = Fluid has minor to moderate effects
C = Fluid has severe effects
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CHEMICAL/SOLUTION	Santoprene®	Tygothane®	PVC	LDPE
Calcium Hypochlorite 5%	A	B	A	A
Calcium Salts	A	A	A	A
Carbon Disulfide	C	C	C	C
Carbon Tetrachloride	C	C	C	C
Castor Oil	B	A	A	*
Chlorine - see Sodium Hypochlorite	*	*	*	*
Chloroacetic Acid	A	C	B	C
Chlorobenzene	C	C	C	C
Chloroform	C	C	C	C
Chlorosulfonic Acid	B	C	C	C
Chromic Acid < 50%	B	C	B	A
Chromium Salts	A	*	A	B
Citric Acid	B	B	B	C
Copper Chloride	A	A	A	A
Copper Sulfate	A	A	A	A
Cottonseed Oil	B	A	B	A
Cyclohexane	C	B	C	C
Diethylaminoethanol	B	B	C	C

CHEMICAL/SOLUTION	Santoprene®	Tygothane®	PVC	LDPE
Ethyl Acetate	A	C	C	C
Ethyl Alcohol	B	C	C	B
Ethyl Chloride	C	C	C	C
Ethylene Dichloride	C	C	C	C
Ethylene Glycol	A	A	A	A
Ethylene Oxide	B	A	C	C
Eucalyptus Oil	C	B	C	C
Fatty Acids	C	B	A	A
Ferric Chloride	A	A	A	A
Ferric Sulfate	A	A	A	A
Ferrous Chloride	A	A	A	A
Ferrous Sulfate	A	A	A	A
Fluoboric Acid	A	C	A	C
Fluosilicic Acid	A	A	A	A
Formaldehyde < 40%	A	B	A	C
Formic Acid	A	C	B	C
Glucose	A	A	A	A
Glue	A	A	A	A

⚠ CAUTION This information has been provided by our suppliers and other reputable sources; we believe it to be a partial listing of fluids that have been used with our feed pumps. The information is provided ONLY as a guide to assist in determining chemical compatibility. Testing under the specific conditions of the application is recommended. Stenner Pump Company assumes no responsibility for its accuracy. Outside factors including but not limited to temperature, pressure, mechanical stress, and solution concentration can affect material compatibility in a particular application. Stenner makes no warranty, expressed or implied, as to the accuracy of this guide or any materials' suitability for fitness or purpose for any application. User assumes all risk and liability for use of this guide.

Chemical Resistance Guide

CHEMICAL/SOLUTION	Santoprene®	Tygothane®	PVC	LDPE
Glycerin	A	A	A	A
Hexane	C	B	B	C
Hydrazine	A	C	C	C
Hydrochloric Acid 20%	A	C	A	A
Hydrochloric Acid 37%	A	C	A	A
Hydrocyanic Acid	A	B	A	A
Hydrofluoric Acid < 48%	A	C	B	A
Hydrofluoric Acid 48-75%	A	C	C	C
Hydrofluoric Acid, anhydrous	B	C	C	C
Hydrogen Peroxide < 50%	A	B	A	B
Hydrogen Sulfide	A	A	B	A
Iodine	A	A	C	B
Isopropyl Alcohol	B	C	A	A
Lacquer Solvents	C	C	C	C
Lactic Acid	A	B	B	A
Lead Acetate	B	A	A	A
Linseed Oil	B	A	A	A
Limenone	C	B	B	B
Lubricating Oils	C	A	B	C
Magnesium Chloride	A	A	B	A
Magnesium Hydroxide	A	A	A	A
Magnesium Sulfate	A	A	A	A
Malic Acid	A	B	A	A
Manganese Salts	A	A	A	A
Mercuric Chloride	A	A	A	A
Methyl Alcohol	A	C	A	A

CHEMICAL/SOLUTION	Santoprene®	Tygothane®	PVC	LDPE
Methylethylketone	C	C	C	C
Methylene Chloride	C	C	C	C
Mineral Oil	B	A	B	B
Mineral Spirits	C	A	B	B
Muriatic Acid, 20 degrees Baume	A	C	A	A
Naphtha	C	B	B	A
Nitric Acid < 10%	A	C	A	B
Nitric Acid 10-30%	B	C	A	C
Nitric Acid 30-60%	C	C	B	C
Nitric Acid 70%	C	C	B	C
Nitric Acid, red fuming	C	C	C	C
Nitrobenzene	B	C	C	C
Nitrous Acid	A	B	*	*
Oleic Acid	A	B	C	C
Oleum 20-25%	C	C	C	C
Oxalic Acid	A	C	B	A
Palmitic Acid	A	B	B	A
Perchloroethylene	C	C	C	C
Petroleum Distillates	C	B	B	C
Phenol	B	C	C	B
Phosphoric Acid	A	C	A	A
Phtalic Acid	A	C	A	A
Pickling Solutions	A	C	*	*
Plating Solutions	A	C	*	*
Polyphosphate	A	A	A	A
Potassium Carbonate	A	A	A	A

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CHEMICAL/SOLUTION	Santoprene®	Tygothane®	PVC	LDPE
Potassium Chlorate	A	A	A	A
Potassium Hydroxide	A	A	A	A
Potassium Dichromate	A	A	A	A
Potassium Iodide	A	A	B	B
Potassium Permanganate	A	A	A	A
Pyridine	A	C	C	B
Sea water	A	A	A	A
Silicone Oil	C	A	A	B
Silver Nitrate	A	A	A	A
Soap Solutions	A	A	A	C
Sodium	A	A	A	A
Sodium Bisulfate	A	A	A	A
Sodium Bisulfite	A	A	A	A
Sodium Borate	A	A	A	A
Sodium Carbonate	A	A	A	A
Sodium Chlorate	A	A	A	A
Sodium Chloride	A	A	A	A
Sodium Dichromate 20%	A	*	B	*
Sodium Hydroxide < 20%	A	B	A	B
Sodium Hydroxide 20-46 1/2%	A	C	A	B
Sodium Hypochlorite 5%	A	B	A	A
Sodium Hypochlorite 6-15%	A	B	A	A
Sodium Nitrate	A	A	A	A
Sodium Silicate	A	A	A	A
Sodium Sulfide	A	A	A	A
Sodium Sulfite	A	A	A	A

CHEMICAL/SOLUTION	Santoprene®	Tygothane®	PVC	LDPE
Solvents	C	B	B	B
Soybean Oil	B	A	A	A
Stannous Chloride 15%	A	A	A	B
Stearic Acid	A	B	B	B
Stoddards Solvent	C	C	C	C
Sulfur Dioxide liquid	A	C	C	C
Sulfur Trioxide	B	C	A	C
Sulfuric Acid < 40%	B	B	B	B
Sulfuric Acid > 40%	C	C	C	C
Sulfurous Acid	A	A	A	B
Tannic Acid 10%	A	B	A	B
Tanning Liquors	A	A	A	A
Tartaric Acid	A	A	A	A
Tetrahydrofuran	C	C	C	C
Titanium Salts	A	A	A	B
Toluene	C	C	C	C
Trichloroethylene	C	C	C	C
Triethanolamine	A	C	C	C
Tri Sodium Phosphate	A	A	A	A
Tung Oil	B	B	C	C
Turpentine	B	B	C	C
Urea	B	A	B	A
Water & Brine	A	A	A	A
Xylene	C	C	C	C
Zinc Chloride	A	A	B	A
Zinc Salts	A	A	A	A

See ⚠ CAUTION on page 2.