CHEMICAL RESISTANCE GUIDE

STENNER PUMPS®

Ratings Key – Chemical Effect

- **A** Fluid has minor or no effects
- **B** Fluid has minor to moderate effects
- **C** Fluid has severe effects
- • No data available

⚠ CAUTION The information is provided ONLY as a guide to assist in determining chemical compatibility for wetted components. 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 / Solution	PP Santoprene® EPDM	Versilon®	PVC	LDPE	FKM	Silicone	Tantalum	Stainless Steel
Acetic Acid 20%	A	B	B	A	B	A	A	A
Acetic Acid 30%	B	C	C	A	B	A	A	B
Acetic Acid, Glacial	C	C	C	C	C	•	A	A
Acetic Anhydride	B	C	C	C	C	C	•	A
Aliphatic Hydrocarbons	B	B	B	B	•	•	•	•
Aluminum Chloride	A	A	A	B	A	B	A	B
Aluminum Sulfate	A	A	A	A	A	A	A	B
Alums	A	A	A	A	A	A	•	A
Ammonium Acetate	B	B	A	A	A	•	•	A
Ammonium Carbonate	A	A	A	A	A	C	•	B
Ammonium Chloride	A	B	A	B	A	C	A	B
Ammonium Hydroxide	A	B	A	A	B	A	B	A
Ammonium Nitrate	A	A	A	A	B	C	A	A
Ammonium Phosphate	A	A	A	A	A	A	•	C
Ammonium Sulfate	A	A	A	A	B	A	A	B
Amyl Acetate	A	C	C	C	C	C	•	A
Aniline	B	C	C	C	C	C	A	B
Antimony Salts	A	A	A	B	•	•	•	•
Arsenic Salts	A	A	A	B	•	•	•	•
Barium Hydroxide	A	A	A	B	A	•	B	B
Barium Salts	A	•	A	B	•	A	•	•
Beer	A	A	A	A	A	•	A	A
Benzene	C	C	C	C	B	•	•	B
Benzoic Acid	A	C	A	A	A	•	A	B
Bleach 5.25%	A	A	A	A	A	•	•	•
Boric Acid	A	A	A	A	A	A	A	A
Bromine	A	B	B	B	A	C	A	C
Butyl Acetate	A	C	C	C	C	C	•	A
Butyric Acid	A	C	B	C	B	C	A	B
Calcium Chloride	A	A	B	A	A	•	A	B
Calcium Hydroxide	A	C	A	A	A	•	B	B
Calcium Hypochlorite 5%	A	B	A	A	A	•	A	B
Calcium Salts	A	A	A	A	•	B	•	•
Carbon Disulfide	C	C	C	C	A	•	•	B
Carbon Tetrachloride	C	C	C	C	A	C	•	B
Castor Oil	B	A	A	•	A	•	•	A
Chlorine	*see Sodium Hypochlorite*							

Chemical / Solution	PP Santoprene® EPDM	Versilon®	PVC	LDPE	FKM	Silicone	Tantalum	Stainless Steel
Chloroacetic Acid	A	C	B	C	C	•	•	A
Chloroform	C	C	C	C	A	C	•	A
Chlorosulfonic Acid	B	C	C	C	C	C	•	B
Chromic Acid < 50%	B	C	B	A	A	C	A	B
Chromium Salts	A	•	A	B	•	•	•	•
Citric Acid	B	B	B	C	A	•	A	A
Copper Chloride	A	A	A	A	A	•	A	C
Copper Sulfate	A	A	A	A	A	•	A	B
Cottonseed Oil	B	A	B	A	A	•	•	A
d-Limonene	C	B	B	B	A	C	•	•
Ethyl Acetate	A	C	C	C	C	B	•	B
Ethyl Alcohol	B	C	C	B	B	•	A	•
Ethyl Chloride	C	C	C	C	A	C	•	A
Ethylene Dichloride	C	C	C	C	A	C	•	B
Ethylene Glycol	A	A	A	A	A	A	•	B
Ethylene Oxide	B	A	C	C	C	C	•	B
Eucalyptus Oil	C	B	C	C	•	•	•	•
Fatty Acids	C	B	A	A	A	C	•	A
Ferric Chloride	A	A	A	A	A	B	A	C
Ferric Sulfate	A	A	A	A	A	B	•	B
Ferrous Chloride	A	A	A	A	A	C	•	C
Ferrous Sulfate	A	A	A	A	A	C	•	B
Fluoboric Acid	A	C	A	C	B	A	•	•
Fluosilicic Acid	A	A	A	A	A	C	•	B
Formaldehyde < 40%	A	B	A	C	C	B	•	A
Formic Acid	A	C	B	C	C	C	A	A
Glucose	A	A	A	A	A	A	•	A
Glycerin	A	A	A	A	A	A	•	A
Hydrochloric Acid 20%	A	C	A	A	A	C	A	C
Hydrochloric Acid 37%	A	C	A	A	A	C	A	C
Hydrocyanic Acid	A	B	A	A	A	C	A	A
Hydrofluoric Acid < 48%	A	C	B	A	A	C	C	C
Hydrofluoric Acid 48-75%	A	C	C	C	A	C	C	C
Hydrofluoric Acid, anhydrous	B	C	C	C	C	•	C	C
Hydrogen Peroxide < 50%	A	B	A	B	A	A	A	A
Hydrogen Sulfide	A	A	B	A	C	•	•	A
Iodine	A	A	C	B	A	C	A	C

Chemical / Solution	PP Santoprene® EPDM	Versilon®	PVC	LDPE	FKM	Silicone	Tantalum	Stainless Steel
Lactic Acid	A	B	B	A	A	A	A	B
Lead Acetate	B	A	A	A	C	C	•	B
Linseed Oil	B	A	A	A	A	A	•	A
Limonene	C	B	B	B	A	C	•	•
Lubricating Oils	C	A	B	C	A	•	•	A
Magnesium Chloride	A	A	B	A	A	A	A	C
Magnesium Hydroxide	A	A	A	A	A	•	A	A
Magnesium Sulfate	A	A	A	A	A	A	A	B
Malic Acid	A	B	A	A	A	B	•	A
Manganese Salts	A	A	A	A	•	B	•	•
Mercuric Chloride	A	A	A	A	A	•	•	C
Methylene Chloride	C	C	C	C	B	•	A	B
Mineral Oil	B	A	B	B	A	•	•	•
Mineral Spirits	C	A	B	B	A	•	•	A
Muriatic Acid, 20° Baume	A	C	A	A	A	•	•	•
Nitric Acid < 10%	A	C	A	B	A	B	A	A
Nitric Acid 10-30%	B	C	A	C	A	C	A	A
Nitric Acid 30-60%	C	C	B	C	A	C	A	A
Nitric Acid 70%	C	C	B	C	A	C	A	A
Nitric Acid, red fuming	C	C	C	C	C	C	•	•
Nitrous Acid	A	B	•	•	B	•	•	B
Oleic Acid	A	B	C	C	B	C	•	A
Oleum 20-25%	C	C	C	C	•	•	•	B
Oxalic Acid	A	C	B	A	A	C	A	A
Palmitic Acid	A	B	B	A	A	C	•	A
Petroleum Distillates	C	B	B	C	•	•	A	A
Peracetic Acid 5%	B	B	B	A	A	A	•	•
Peracetic Acid 15%	B	B	B	A	A	B	•	•
Phenol	B	C	C	B	A	C	•	B
Phosphoric Acid	A	C	A	A	A	C	A	C
Phthalic Acid	A	C	A	A	A	B	•	A
Pickling Solutions	A	C	•	•	B	•	•	•
Plating Solutions	A	C	•	•	A	C	•	•
Polyphosphate	A	A	A	A	•	•	•	•
Potassium Carbonate	A	A	A	A	A	•	•	B
Potassium Chlorate	A	A	A	A	A	B	•	B
Potassium Hydroxide	A	A	A	A	C	C	B	A
Potassium Dichromate	A	A	A	A	A	•	•	B
Potassium Iodide	A	A	B	B	A	•	•	A
Potassium Permanganate	A	A	A	A	A	•	•	B
Sea Water	A	A	A	A	A	•	A	C

Chemical / Solution	PP Santoprene® EPDM	Versilon®	PVC	LDPE	FKM	Silicone	Tantalum	Stainless Steel
Silicone Oil	C	A	A	B	A	C	•	A
Silver Nitrate	A	A	A	A	A	A	•	B
Soap Solutions	A	A	A	C	A	A	•	A
Sodium	A	A	A	A	•	•	•	•
Sodium Bisulfate	A	A	A	A	A	•	•	C
Sodium Bisulfite	A	A	A	A	A	A	•	B
Sodium Borate	A	A	A	A	A	A	•	B
Sodium Carbonate	A	A	A	A	A	A	•	A
Sodium Chlorate	A	A	A	A	A	C	•	B
Sodium Chloride	A	A	A	A	A	A	A	B
Sodium Dichromate 20%	A	•	B	•	A	•	•	•
Sodium Hydroxide < 20%	A	B	A	B	C	A	B	B
Sodium Hydroxide 20-46.5%	A	C	A	B	C	•	C	B
Sodium Hypochlorite 5%	A*	B	A	A	A	B	A	C
Sodium Hypochlorite 6-15%	A*	B	A	A	A	B	A	C
Sodium Nitrate	A	A	A	A	A	C	A	B
Sodium Silicate	A	A	A	A	A	A	•	B
Sodium Sulfide	A	A	A	A	A	A	•	C
Sodium Sulfite	A	A	A	A	A	A	•	A
Solvents	C	B	B	B	•	•	•	•
Soybean Oil	B	A	A	A	A	•	•	A
Stannous Chloride 15%	A	A	A	B	A	•	•	A
Stearic Acid	A	B	B	B	A	B	•	A
Sulfur Dioxide liquid	A	C	C	C	B	•	•	A
Sulfur Trioxide	B	C	A	C	A	•	•	C
Sulfuric Acid < 40%	B	B	B	B	A	C	A	C
Sulfuric Acid > 40%	C	C	C	C	A	C	A	C
Sulfurous Acid	A	A	A	B	C	C	•	B
Tannic Acid 10%	A	B	A	B	A	B	•	A
Tanning Liquors	A	A	A	A	A	•	•	A
Tartaric Acid	A	A	A	A	A	A	•	C
Titanium Salts	A	A	A	B	•	•	•	•
Triethanolamine	A	C	C	C	C	•	•	•
Trisodium Phosphate	A	A	A	A	A	•	•	B
Tung Oil	B	B	C	C	A	•	•	•
Turpentine	B	B	C	C	A	C	•	A
Urea	B	A	B	A	A	B	•	B
Water & Brine	A	A	A	A	A	B	•	•
Zinc Chloride	A	A	B	A	A	A	A	B
Zinc Salts	A	A	A	A	•	•	•	•

NOTE: FKM tested to ANSI/NSF 61 with water only.

* Products tested and certified by WQA according to ANSI/NSF 61 for contact with Sodium Hypochlorite and Water only and ANSI/NSF 372.

