

## Technical Information

### Chemical Compatibility

## Chemical Compatibility

The Microlab 600's fluid path consists of PTFE-based materials (PTFE and CTFE) and borosilicate glass. These materials are resistant to a wide variety of acids and bases at room-to-moderate temperatures. Most chemicals do not affect PTFE at normal operating temperatures

Important: Do not use the Microlab 600 for prolonged periods at high temperatures with aromatic or highly halogenated compounds. These compounds may cause the Microlab's fittings to swell, adversely affecting performance and reducing the life of system components. Below is a chemical compatibility chart.

If you have any questions about chemical resistance to specific compounds, please contact Hamilton Company; check out any unusual or reactive compounds before using them with your Microlab 600 system.

**The following table contains information about chemical reactivity with the Microlab 600 system at room temperature.**

#### Legend

- 0 = No data available
- A = No effect, excellent
- B = Minor effect, good
- C = Moderate effect, fair
- D = Severe effect, not recommended

Chemical	PTFE	Borosilicate Glass	CTFE (Kel-F)
Acetaldehyde	A	A	A
Acetates	A	B	A
Acetic Acid	A	A	A
Acetic Anhydride	A	0	A
Acetone	A	A	A
Acetyl Bromide	A	0	0
Ammonia	A	A	A
Ammonium Hydroxide	A	0	A
Ammonium Phosphate	A	0	A
Ammonium Sulfate	A	0	A
Amyl Acetate	A	A	A
Aniline	A	A	A
Benzene	A	A	B-C
Benzyl Alcohol	A	A	A
Boric Acid	A	0	A
Bromine	A	A-B	A
Butyl Acetate	A	A	A
Butyl Alcohol	A	A	B
Carbon Sulfide	A	A	A
Carbon Tetrachloride	A	A	B-C
Chloroacetic Acid	A	A	A
Chlorine, liquid	A	A	B
Chlorobenzene	A	0	B
Chloroform	A	A	B
Chromic Acid	A	A	A
Cresol	A	A	A
Cyclohexane	A	A	B
Ethers	A	A	B
Ethyl Acetate	A	A	B-C

Ethyl Alcohol	A	A	0
Ethyl Chromide	A	0	B
Ethyl Ether	A	0	A-B
Formaldehyde	A	A	A
Formic Acid	A	A	A
Freon, 11, 12, 22	A	A	B-C
Gasoline	A	A	A
Glycerine	A	A	A
Hydrochloric Acid	A	A	A
Hydrochloric Acid (conc)	A	A	A
Hydrofluoric Acid	A	D	B
Hydrogen Peroxide	A	A	B
Hydrogen Peroxide (conc)	A	A	B
Hydrogen Sulfide	A	0	A-B
Kerosene	A	A	A
Methyl Alcohol	A	A	A
Methyl Ethyl Ketone (MEK)	A	A	A-B
Methylene Chloride	A	A	B
Naphtha	B	0	A
Nitric Acid	A	A	A
Nitric Acid (conc)	A	A-B	A-B
Nitrobenzene	A	A	A-B
Phenol	A	A	B
Pyridine	A	0	A
Silver Nitrate	A	A	B
Soap Solutions	A	A	A
Stearic Acid	A	A	0
Sulfuric Acid	A	A	A
Sulfuric Acid (conc)	A	A	A
Sulfurous Acid	A	0	A-B
Tannic Acid	A	0	A-B
Tanning Extracts	0	0	0
Tartaric Acid	A	0	B
Toluene	A	A	B
Trichlorethane	A	A	B
Trichloroethylene	A	A	B-C
Turpentine	A	A	A
Water	A	A	A
Xylene	A	A	B-C