

SCILOGEX SCI-Spense/iFlow/iTrite Dispensers/Burettes Chemical Compatibility at 20°C

The DispensMate's liquid pathway consists of BSG, PTFE, FEP and the anti-drip cap is PP; non-contact parts include the outer case/body that consists of PC and other materials. Please note that this is a general guide of use with SCILOGEX dispensers with various popular chemicals. This guide is not intended as an absolute materials recommendation. Please read the user manual carefully before use. Good Laboratory Practice would be to rinse out the dispenser at the end of each day with distilled water to prevent corrosive liquids being left in contact with the parts for prolonged periods and to insure valves and liquid pathway are kept clean. SCILOGEX assumes no liability for results obtained or damage incurred through the application of the data presented in this guide.

| Reagent | Compatibility | Reagent | Compatibility | Reagent | Compatibility |
|--------------------------------|-----------------------|------------------------------|-----------------------|---|-----------------------|
| Acetaldehyde | ~ | Cumene (Isopropyl | ~ | Methylene chloride | |
| Acetic acid (glacial), 100% | ~ | Cyclohexane | | Mineral oil (Engine oil) | ~ |
| Acetic acid, 96% | ~ | Cyclohexanone | ~ | Monochloroacetic acid | ~ |
| Acetic anhydride | | Cyclopentane | | Nitric acid, 10% | ✓ |
| Acetone | ~ | Decane | ~ | Nitric acid, 20-70% | |
| Acetonitrile | | 1-Decanol | ~ | Nitrobenzene | ~ |
| Acetophenone | | Dibenzyl ether | ✓ | Oleic acid | ~ |
| Acetyl chloride | | Dichloroacetic acid | | Oxalic acid | ~ |
| Acetylacetone | ✓ | Dichlorobenzene | ✓ | n-Pentane | |
| Acrylic acid | ✓ | Dichloroethane | | Peracetic acid | |
| Acrylonitrile | ✓ | Dichloroethylene | | Perchloric acid | ~ |
| Adipic acid | ~ | Dichloromethane | | Perchloroethylene | |
| Allyl alcohol | v | Diesel oil (Heating oil) | | Petroleum | ~ |
| Aluminum chloride | ✓ | Diethanolamine | ~ | Petroleum ether | |
| Amino acids | · · | Diethyl ether | - | Phenol | ✓ |
| Ammonium chloride | · · | Diethylamine | ~ | Phenylethanol | · · |
| Ammonium fluoride | ~ | 1,2Diethylbenzene | ~ | Phenylhydrazine | · · |
| Ammonium hydroxide, | | | | | • |
| 30% (Ammonia) | ~ | Diethylene glyco | ~ | Phosphoric acid, 85% | ~ |
| Ammonium sulfate | ~ | Dimethyl sulfoxide (DMSO) | ~ | Phosphoric acid, 85% + Sulfuric acid, 98%, 1:1 | |
| n-Amyl acetate | ~ | Dimethylaniline | ~ | Piperidine | ~ |
| Amyl alcohol (Pentanol) | ~ | Dimethylformamide (DMF) | ~ | Potassium chloride | ~ |
| Àmyl chloride Chloropentane | | 1,4 Dioxane | | Potassium dichromate | ~ |
| Aniline | ✓ | Diphenyl ether | ~ | Potassium hydroxide | ✓ |
| Barium chloride | ✓ | Ethanol | ~ | Potassium permanganate | ~ |
| Benzaldehyde | ✓ | Ethanolamine | ~ | Propionic acid | ✓ |
| Benzene (Benzol) | ~ | Ethyl acetate | | Propylene glycol { Pro Qanedio!} | ~ |
| Benzine (Gasoline) | | Ethyl methyl ketone | ~ | Pyridine | ~ |
| Benzoyl chloride | ~ | Ethylbenzene | | Pyruvic acid | ~ |
| Benzyl alcohol | ✓ | Ethylene chloride | | Salicylaldehyde | ✓ |
| Benzylamine | ~ | Fluoroacetic acid | | Scintillation fluid | ~ |
| Benzylchloride | ✓ | Formaldehyde, 40% | ~ | Silver acetate | ~ |
| Boric acid, 10% | ~ | Formamide | ~ | Silver nitrate | ~ |
| Bromobenzene | ~ | Formic acid, 100% | ~ | Sodium acetate | ~ |
| Bromonaphthalene | ✓ | Glycerol | | Sodium chloride | ~ |
| Butanediol | · · | Glycol(Ethylene glycol) | ~ | Sodium dichromate | ~ |
| 1-Butanol | ~ | Glycolic acid, 50% | ~ | Sodium fluoride | ~ |
| n-Butyl acetate | ~ | Heating oil (Diesel oil) | | Sodium hydroxide, 30% | ~ |
| Butyl methyl ether | ~ | Heptane | | Sodium hypochlorite | ✓ |
| Butylamine | ✓ | Hexane | | Sulfuric acid, 95% | ~ |
| Butyric acid | ~ | Hexanoic acid | ~ | Tartaric acid | ✓ |

| Calcium carbonate | ~ | Hexanol | ~ | Tetrachloroethylene | |
|-----------------------------|----------|---------------------------|---|-------------------------------------|---|
| Calcium chloride | ~ | Hydriodic acid | ~ | Tetrahydrofuran (TIIF) | |
| Calcium hydroxide | ~ | Hydrobromic acid | | Tetramethylammoniu m lly_droxide | ~ |
| Calcium hypochlorite | ~ | Hydrochloric acid, 20% | > | Toluene | |
| Carbon tetrachlorid | | Hydrochloric acid, 20-37% | | Trichloroacetic acid | |
| Chloro naphthalene | ~ | Hydrogen peroxide, 35% | | Trichlorobenzene | |
| Chloroacetaldehyd e, 45% | ~ | Isoamyl alcohol | > | Trichloroethane | |
| Chloroacetic acid | ~ | Isobutanol | ~ | Trichloroethylene | |
| Chloroacetone | ~ | Isooctane | | Trichlorotrifluoro ethane | |
| Chlorobenzene | ~ | Isopropanol 2-Proponal | ~ | Triethanolamine | ~ |
| Chlorobutane | ~ | Isopropyl ether | ~ | Triethylene glycol | ~ |
| Chloroform | | Lactic acid | ~ | Trifluoro ethane | |
| Chlorosulfonic acid | | Methanol | | Trifluoroacetic acid (TFA) | |
| Chromic acid, 10% | ~ | Methoxybenzene | ~ | Turpentine | |
| Chromic acid, 50% | ~ | Methyl benzoate | ~ | Urea | ~ |
| Chromosulfuric acid | v | Methyl butyl ether | ~ | Xylene | |
| Copper sulfate | v | Methyl formate | ~ | Zinc chloride, 10% | ~ |
| Cresol | | Methyl propyl ketone | ~ | Zinc sulfate, 10% | ~ |

Notes:

- 1. Hydrochloric acid in the presence of oxidizing may cause slight attack on prolonged boiling
- 2. Sulfuric acid -will dull the surface with prolonged heating at above 250°c
- 3. Nitric acid (fuming) may dull the surface with prolonged heating
- 4. **Phosphoric acid** -may dull the surface with prolonged heating
- 5. Potassium hydroxide the fused salt will cause slight attack
- 6. Sodium hydroxide -the fused salt will cause slight attack
- 7. **Hydrogen peroxide 30%** in the presence of hydrochloric acid may cause slight attack with prolonged boiling
- 8. Ammonia heated in an ammonia atmosphere will darken and dull the surface, leading to a porous crystalline appearance.
- 9. Chlorine in the presence of hydrochloric acid may cause slight attack with prolonged boiling
- 10. **Potassium permanganate** -in the presence of hydrochloric acid may cause slight attack with prolonged boiling
- 11. Sodium carbonate the fused salt may cause slight attack
- 12. Mercury will readily attack at any temperature
- 13. Silver nitrate the fused salt may cause slight attack and discolor the surface
- 14. **Organic compounds** there is no data available on most of the organic compounds, however it is unlikely they would have any detrimental effect but we can give no guarantee to this statement.