## SCILOGEX DispensMate Plus Bottle-top Dispenser Chemical Compatibility at 20°C

SCILOGEX-DispensMate's liquid pathway is manufactured with the following materials: Borosilicate Glass (BSG), PTFE and FEP. Please read the user manual carefully before use for preventative maintenance and cleaning procedures. Good laboratory practice suggests flushing out the dispenser at the end of each day with distilled water to prevent corrosive liquids being left in contact with the internal parts for too long. WARNING this information has been supplied to DragonLab by other reputable sources. Use this chart as a general guide only. We take no responsibility for accuracy of information provided.

| CHEMICAL                     | BSG      | PTFE | FEP |
|------------------------------|----------|------|-----|
| Acids                        |          |      |     |
| Acetic, 25%                  | R        | R    | R   |
| Hydrochloric, 20%            | R        | R    | R   |
| Sulphuric, 25%               | R        | R    | R   |
| Nitric, 30%                  | R        | R    | R   |
| Phosphoric 25%               | R        | R    | R   |
| Formic, 25%                  | R        | R    | R   |
| Formic Acid, 25%             | R        | R    | R   |
| Trichloroethane, 10%         | RE       | R    | R   |
| Chromic Acid, 20%            | R        | R    | R   |
| Hydrofluoric Acid, 35%       | NR       | NR   | R   |
| Alkalies                     |          |      |     |
| Ammonium Hydroxide, 25%      | R        | R    | R   |
| Sodium Hydroxide, 50%+       | R        | R    | NR  |
| Calcium Hydroxide            | R        | R    | NR  |
| Potassium Hydroxide          | R        | R    | NR  |
| Alcohols                     |          |      |     |
| Methanol, 98%                | R        | R    | R   |
| Ethanol, 98%                 | R        | R    | R   |
| Isopropanol                  | R        | R    | R   |
| Amyl Alcohol, Butanol        | R        | R    | R   |
| Benzyl Alcohol               | R        | R    | R   |
| Ethylene Glycol              | R        | R    | R   |
| Propylene Glycol             | R        | R    | R   |
| Glycerol                     | R        | R    | R   |
| Hydrocarbons                 |          |      |     |
| Hexane                       | R        | R    | R   |
| Xylene                       | R        | R    | R   |
| Toluene                      | R        | R    | R   |
| Benzene                      | R        | R    | R   |
| Kerosene                     | R        | R    | R   |
| Gasoline                     | <u>R</u> | R    | R   |
| Decalin                      | R        | R    | ?   |
| Halogenated Hydrocarbons     |          |      |     |
| Methyl Chloride              | R        | R    | R   |
| Chloroform                   | R        | R    | R   |
| Trichloroethylene            | R        | R    | R   |
| Freon                        | R        | R    | R   |
| Carbon Tetrachloride         | R        | R    | R   |
| Ketones                      | D        | D    | D   |
| Acetone Mathyl Fabril Katana | R        | R    | R   |
| Methyl Ethyl Ketone          | R        | R    | R   |
| Isopropyl Acetone            | R        | R    | R   |
| Methyl Isobutyl Ketone       | R        | R    | R   |
| Esters                       |          |      |     |

| Ethyl Acetate                   | R  | R | R |
|---------------------------------|----|---|---|
| Methyl Acetate                  | R  | R | R |
| n-Amyl Acetate                  | R  | R | R |
| n-Butyl Acetate                 | R  | R | R |
| Propylene Glycol Acetate        | R  | R | R |
| Ethyl Acetate                   | R  | R | R |
| Benzyl Acetate                  | R  | R | R |
| Isopropyl Acetate               | R  | R | R |
| Oxides – Ethers                 |    |   |   |
| Ethyl Ether                     | R  | R | R |
| 1,4 Dioxane                     | R  | R | R |
| Tetrahydrofuran                 | R  | R | R |
| Dimethylsulphoxide (DMSO)       | R  | R | R |
| Isopropyl Ether                 | R  | R | R |
| Solvents with Nitrogen          |    |   |   |
| Dimethyl Formamide              | R  | R | R |
| Alanine                         | R  | R | ? |
| Miscellaneous                   |    |   |   |
| Formaldehyde Solution, 30%      | R  | R | R |
| Hydrogen Peroxide, 30%          | R  | R | R |
| Pine Oil                        | R  | R | R |
| Acetaldehyde                    | R  | R | R |
| Ammonia, 25% ac. Sol.           | R  | R | R |
| Calcium Chloride aq. Sol        | R  | R | R |
| Chlorine                        | R  | R | R |
| Fluorine                        | RE | R | R |
| Hexane                          | R  | R | R |
| Potassium Permanganate aq. Sol. | R  | R | ? |
| Magnesium Chloride aq. Sol.     | R  | R | ? |
| Methylene Chloride              | R  | R | R |
| Phenol, 100%                    | R  | R | R |
| Silver Nitrate                  | R  | R | R |
| Toluene                         | R  | R | R |
| Hydrogen Peroxide, 30%          | R  | R | R |
| Xylene                          | R  | R | R |
| Zinc Chloride, 10%              | R  | R | R |
| Zinc Sulphate, 10%              | R  | R | R |
| Kov                             |    |   |   |

Key:

R = Resistant

**RE** = Resistant with some effect after exposure

**NR** = Non-Resistant

? = Not Known

## Notes:

1. **Hydrochoric acid** – in the presence of oxidising may cause slight attack on prolonged boiling

- 2. Sulphuric 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 on prolonged boiling
- 8. **Ammonia** heating 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 on prolonged boiling
- 10. Potassium permanganate in the presence of hydrochloric acid may cause slight attack on 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 discolour the surface

**Organic compounds** – there is no data available on most of the organic compounds listed, it is unlikely they would have any detrimental effect but we can give no guarantee to this statement