MBI DispensMate Dispensers 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 MBI 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. MBI 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, 30%	✔
Acetone	✔	Decane	✔	Nitric acid, 30-70%	
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	✔	Diesel oil (Heating oil)		Petroleum	✔
Aluminum chloride	✔	Diethanolamine	✔	Petroleum ether	
Amino acids	✔	Diethyl ether		Phenol	✔
Ammonium chloride	✔	Diethylamine	✔	Phenylethanol	✔
Ammonium fluoride	✔	1,2 Diethylbenzene	✔	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	✔
Amyl 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, 98%	✔
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	✔	Isopropano l J2-	✔	Triethanolamine	✔
Chlorobutane	✔	Isopropyl ether	✔	Triethylene glycol	✔
Chloroform		Lactic acid	✔	Trifluoro ethane	
Chlorosulfonic acid		Methanol	✔	Trifluoroacetic acid (TFA)	
Chromic acid, I0%	✔	Methoxybenzene	✔	Turpentine	
Chromic acid, 50%	✔	Methyl benzoate	✔	Urea	✔
Chromosulfuric acid	✔	Methyl butyl ether	✔	Xylene	
Copper sulfate	✔	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** -willdull the surface with prolonged heating at above 250°c
3. **Nitric acid** (fuming) - may dullthe 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, howeverit is unlikely they would have any detrimental effect but we can give no guarantee to this statement.