

DispensMate Dispenser Chemical Compatibility at 20°C

The devices of Dlab-DispensMate which contact with dispensed liquid consist of BSG, PTFE, FEP, and closure cap of outlet is PP; non-contact liquids parts consist of PC and other materials.

The devices of Dlab-DispensMate-Pro which contact with dispensed liquid consist of BSG, PFA, PTFE, FEP, ETFE, PVDF and closure cap of outlet is PP; non-contact liquids parts consist of PC and other materials.

Please notice the table is just a directional guide not the manufacturer's commitment. Please read the user manual carefully before use and to do related experiments can necessarily which can be used to determine whether should be used. Good laboratory practice would be to rinse out the liquid handling unit at the end of each day with distilled water to prevent corrosive liquids being left in contact with the parts for too long.

Code explanations

“+” represent good resistance

“blank” represent acceptable with limitations

“-_” represent not recommended.

	<i>DispensMate-Pro</i>	<i>DispensMate</i>		<i>DispensMate-Pro</i>	<i>DispensMate</i>		<i>DispensMate-Pro</i>	<i>DispensMate</i>
Acetaldehyde	+	+	Chromic acid ,50%	+	+	Methyl propyl ketone	+	+
Acetanide	+	+	Chromosulfuric acid	+	+	Methylene chloride		-
acetic acid, 100%	+	+	Citric acid	+	+	Mineral oil (engine oil)	+	+
acetic acid ,96%	+	+	Copper fluoride	+	+	Natriumacetat	+	+
Acetic anhydride	+		Copper sulphate	+	+	Natriumchlorid	+	+
Acetone	+	+	Cresol		-	Natriumdichromat	+	+
Acetonitrile	+	+	Cyclohexan			Natriumfluorid	+	+
Acetophenon	+		Cyclohexanon	+	+	Nitric acid	+	+
Acetylchlorid	+		Cyclopentane			Nitric acid30%-70%	-	-
Acetylaceton	+	+	Decan	+	+	Nitrobenzol	+	+
acrylic acid	+	+	1-Decanol	+	+	Octane	+	+
Acrylnitril	+	+	Dibenzylether	+	+	Oil(vegetable,animal)	+	
adipic acid	+	+	Dichloroacetic			Oleic acid	+	+
Aallylacetate	+	+	Dichlorbenzol	+	+	Oxalic acid	+	+
allyl alcohol	+	+	Dichloroethane	+	-	n-Pentane	-	
aluminum chloride	+	+	Dichlorethylen			Peracetic acid	-	
amino acids	+	+	Dichlormethan	+		Perchloric acid	+	+
ammonia, 20%	+	+	Diesel oil (heating oil) ,bp 250-350 °C	+		Perchlorethylene	-	
Ammonia, 20-30%	+		diethanolamine	+	+	Petroleum ,bp 180-220°C		
Ammonium chloride	+	+	Diethylether			Petroleum ether ,bp 40-70°C		
Ammonium fluoride	+	+	diethylamine	+	+	Phenol	+	+
Ammonium	+	+	Diethylbenzene	+	+	Phenylethanol	+	+
ammonium sulfate	+	+	Diethylene glycol	+	+	Phenylhydrazine	+	+
n-amyl acetate	+	+	Dimethyl sulfoxide(DMSO)	+	+	phosphoric acid,100%	+	-
Amyl alcohol (pentanol)	+	+	Dimethylaniline	+	+	Phosphoric acid , ≤85%	+	+
Amylchlorid (Chlorpentan)		-	Dimethylformamide (DMF)	+	+	Piperidine	+	+
Aniline	+	+	1,4 Dioxane		-	Potassium chloride	+	+
Arsenicacids	+		Diphenylether	+	+	Potassium dichromate	+	+
Ascorbicacids	+	+	Ethanol	+	+	Potassium hydroxide	+	+
Bariumbromide	+	+	Ethanolamine	+	+	Potassium permanganate	+	+
Barium chlorid	+	+	Ethylacetate	+		Potassium sulfate	+	+
Benzaldehyde	+	+	Ethylbenzene	-		Propionic	+	+
Benzene	+	+	Ethylene diamine	+	+	Propylene glycol (Propanediol)	+	+

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Benzoyl chloride	+	+	Ethylmethylketon	+	+	Pyridine	+	+
benzyl alcohol	+	+	Fluorine acetic acid			Pyruvic acid	+	+
Bitteralmondoil	+		formaldehyde , ≤40%	+	+	Salicylaldehyde	+	+
Bnzylamine	+	+	Formamide	+	+	Scintillation cocktail	+	+
Benzylchlorid	+	+	Formic acid	+		Silver acetate	+	+
Boric acid ,10%	+	+	Glycerin	+		Silver nitrate	+	+
Bromine	-	-	Glycerol	+		Sodium hydroxide , 30%	+	+
Bromobenzene	+	+	Glucose	+		Sodium hypochlorite	+	+
Bromonaphthalene	+	+	Glycol (Ethylene glycol)	+		Sulfuric acid , 98%		-
Butanediol	+	+	Glycolic acid , ≤50%	+	+	Tartaric acid	+	+
Butanetriol	+	+	Heating oil (diesel oil), bp 250-350 °C	+		Tetrachlorethylene		-
1-Butanol	+	+	Heptane	+		Tetrahydrofuran (THF)		-
Butyl acetate	+	+	Hexane	+	-	Tetramethylammonium hydroxide	+	
Butyl methyl ether	+	+	Hexanoic	+	+	Toluene		-
Butylamine	+	+	Hexanol	+	+	Trichloroacetic acid		-
Butyric	+	+	Hydroiodic ≤ 57% **	+	+	Trichlorobenzene		-
Calcium carbonate	+	+	hydrobromic	+		Trichloroethane		-
Calciumchlorid	+	+	Hydrochloric acid, 20%	+	+	Trichlorethylene		-
Calciumhydroxid	+	+	Hydrogen peroxide , ≤35%	+	-	Trichlorotrifluoroethane		-
Calcium hypochlorite	+	+	Isoamylalcohol	+	+	Triethanolamine	+	+
Tetrachlorkohlenstoff	+	+	Isobutanol	+	+	Triethylamine	+	
chloronaphthalene	+	+	Isooctane	+		Triethylene glycol	+	+
Chloroacetaldehyde ,45%	+	+	Isopropanol (2-propanol)	+	+	Trifluoroethane		-
Chloroacetic acid	+	+	Isopropylether	+	+	Trifluoroacetic acid		-
Chloroacetone	+	+	Lactic acid	+	+	Urea	+	+
Chlorobenzene	+	+	Methanol	+		Xylene		-
Chlorobutane	+	+	Methoxybenzene	+	+	Zinc chloride , ≤10%	+	+
Chloroform		-	Methyl benzoate	+	+	Zinc sulfate , ≤10%	+	+
Chlorosulfonic acid		-	Methyl formate	+	+	Cumol (Isopropylbenzol)	+	+

Notes:

1. Hydrochloric 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.
14. Organic compounds- the pretest experiments should be done as there is almost no related data about majority of the organic compounds.