

Chemical Compatibility/Eutectic Temperature Chart

Chemical / Solvent	Stainless or PTFE	Acrylic or Glass	Melting Point Temp. (°C)	Recommended Collector Temp. (°C)	Liquid N2 Trap	Rotary Vane Pump Recommendation	Additional notes
Acetaldehyde	Stainless	Glass	-123.5	-105	Y	Combination	Diluted may not require liquid N2 trap
Acetic Acid (Glacial)	PTFE	Glass	16.5	-50	N	Standard	
Acetic Anhydride	PTFE	Glass	-73.1	-105	N	Combination	
Acetone	Stainless	Glass	-94.9	-105	Y	Combination	Diluted may not require liquid N2 trap
Acetonitrile	Stainless	Glass	-42	-84	N	Combination	
Ammonium Hydroxide (10%)	Stainless	Acrylic	-57.5	-84	N	Combination	
Ammonium Hydroxide (Conc)	Stainless	Acrylic	-91.5	-105	Y	Combination	Diluted may not require liquid N2 trap
Amyl Alcohol	Stainless	Glass	-77.6	-105	N	Combination	
Aniline	Stainless	Glass	-6.3	-50	N	Combination	
2-Butanol	Stainless	Glass	-114.7	-105	Y	Combination	Diluted may not require liquid N2 trap
Benzene	PTFE	Glass	5.5	-50	N	Standard	
Benzoic Aldehyde	PTFE	Glass	-26	-50	N	Standard	
Benzyl Alcohol	PTFE	Glass	-15	-50	N	Standard	
Butanol	Stainless	Glass	-89.5	-105	Y	Combination	
Butyl Acetate	PTFE	Glass	-74	-105	N	Combination	
Carbon Disulfide	Stainless	Glass	-110.8	-105	Y	Combination	Diluted may not require liquid N2 trap
Carbon Tetrachloride	PTFE	Glass	-22.9	-84	N	Combination	
Citric Acid	PTFE	Acrylic	-10	-50	N	Combination	
Chlorine (2% Aqueous)	PTFE	Acrylic	-101.5	-105	Y	Combination	Diluted may not require liquid N2 trap
Chlorobenzene	Stainless	Glass	-45	-84	N	Combination	
Chloroform	Stainless	Glass	-63.5	-84	N	Combination	
Cyclohexane	Stainless	Glass	6.5	-50	N	Combination	
Cyclohexanone	Stainless	Glass	-16.4	-50	N	Combination	
1,2-Dichloroethane	PTFE	Glass	-35	-84	N	Combination	
1,1-Dichloroethene	PTFE	Glass	-122	-105	Y	Combination	Diluted may not require liquid N2 trap
1,2-Dimethoxyethane	PTFE	Glass	-58	-84	N	Combination	
1,4-Dioxane	PTFE	Glass	11.8	-50	N	Combination	
Diacetone Alcohol	PTFE	Glass	-47	-84	N	Combination	
Dichloromethane	PTFE	Glass	-96.7	-105	Y	Combination	Diluted may not require liquid N2 trap
Diethylene Glycol	Stainless	Glass	-10.5	-50	N	Standard	
Dimethyl Formamide (DMF)	Stainless	Glass	-61	-84	N	Combination	
Dioxane	PTFE	Glass	11.8	-50	N	Standard	
Ethyl Acetate	PTFE	Glass	-83.6	-105	N	Combination	
Ethanol	Stainless	Glass	-114.3	-105	Y	Combination	Diluted may not require liquid N2 trap
Ethylene Bromide	Stainless	Glass	9	-50	N	Standard	
Ethylene Chloride	PTFE	Glass	-138	-105	Y	Combination	Diluted may not require liquid N2 trap
Ethylene Dibromide	PTFE	Glass	9	-50	N	Standard	
Ethylene Glycol	PTFE	Acrylic	-12.9	-50	N	Standard	
Ethylene Oxide	PTFE	Glass	-111.3	-105	Y	Combination	Diluted may not require liquid N2 trap

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Formaldehyde (40%)	Stainless	Acrylic	-15	-50	N	Combination	
Formamide	Stainless	Glass	2	-50	N	Standard	
Formic Acid	PTFE	Acrylic	8.4	-50	N	Standard	
Glycerol	Stainless	Acrylic	18	-50	N	Standard	
Heptane	Stainless	Glass	-90.6	-105	Y	Combination	Diluted may not require liquid N2 trap
Hexane	Stainless	Glass	-95	-105	Y	Combination	Diluted may not require liquid N2 trap
Hydrochloric Acid	PTFE	Glass	-27.3	-84	N	Combination	
Hydrogen Peroxide (28%)	PTFE	Glass	-0.4	-50	N	Combination	
Isooctane	Stainless	Glass	-107.4	-105	Y	Combination	Diluted may not require liquid N2 trap
Isopropyl Alcohol	Stainless	Glass	-89	-105	N	Combination	
Methyl Alcohol (100%) Methanol	Stainless	Glass	-97	-105	Y	Combination	
Methyl Benzoate	PTFE	Glass	-12.5	-50	N	Combination	
Methyl Butyl Ketone	Stainless	Glass	-71	-105	N	Combination	
Methyl Chloride	Stainless	Glass	-97.7	-105	Y	Combination	Diluted may not require liquid N2 trap
Methyl Cyclohexane	PTFE	Glass	-126.3	-105	Y	Combination	Diluted may not require liquid N2 trap
Methyl Ethyl Ketone	Stainless	Glass	-86	-105	N	Combination	
Methylamine	Stainless	Glass	-94	-105	Y	Combination	Diluted may not require liquid N2 trap
Methylene Chloride	PTFE	Glass	-96.7	-105	Y	Combination	Diluted may not require liquid N2 trap
Milk	Stainless	Acrylic	0.5	-50	N	Standard	
N-Butyric Acid	PTFE	Glass	-7	-50	N	Combination	
N-Butyl Alcohol	Stainless	Glass	-89	-105	Y	Combination	Diluted may not require liquid N2 trap
N-Octane	PTFE	Glass	-56.8	-84	N	Combination	
N,N-Dimethylacetamide	Stainless	Glass	-20	-50	N	Combination	
N,N-Dimethylformamide	Stainless	Glass	-61	-84	N	Combination	
Nitric Acid (concentrated)	PTFE	Glass	-43	-84	N	Combination	
Nitrobenzene	PTFE	Glass	5.9	-50	N	Combination	
Nitromethane	Stainless	Glass	-29	-50	N	Combination	
Oleic Acid	Stainless	Glass	13	-50	N	Standard	
Perchloroethylene	PTFE	Glass	-19	-50	N	Combination	
Propylene Glycol	PTFE	Acrylic	-59	-84	N	Combination	
Pyridine	Stainless	Glass	-41.6	-84	N	Combination	
1,1,1-Trichloroethane	PTFE	Glass	-33	-84	N	Combination	
1,1,2-Trichloroethane	PTFE	Glass	-36.6	-84	N	Combination	
Tetralin	PTFE	Glass	-35.8	-84	N	Combination	
Toluene	Stainless	Glass	-93	-105	Y	Combination	Diluted may not require liquid N2 trap
Tricresyl Phosphate	PTFE	Glass	-40	-84	N	Combination	
Triethyl Amine	Stainless	Glass	-114.7	-105	Y	Combination	Diluted may not require liquid N2 trap
Water	Stainless	Acrylic	0	-50	N	Standard	
Water (Sea/Salt)	PTFE	Acrylic	varies	-84	N	Combination	
Xylene	PTFE	Glass	-47.4	-84	N	Combination	