

Attachment I - Tables

Chemical Resistance

Information presented in the following table is to serve as a guide for the use of Science Services tubes. The chemical resistance data has been generated in tests at 27°C and below. Science Services tubes may be frozen but should be warmed to at least -5°C before centrifugation is begun. For chemicals not listed in this table, please test your solutions before spinning your valuable samples. The data presented here is to be used as a general guideline only and is not meant to imply or express a guarantee of safety for use of tubes in the ultracentrifuge.

Reagent	PA	PC	PCB	Reagent	PA	PC	PCB	Reagent	PA	PC	PCB
Acetic Acid, 5%	S	M	S	Ethylene Glycol	S		M	Potassium Chlorate	S	S	S
Acetic Acid, 60%	S	U	U	Ferric Chloride	S			Potassium Chloride	S	S	S
Acetic Acid, glacial	S	U	U	Formaldehyde, 40%	S	U	S	Potassium Hydroxide, 5%	S		U
Acetone	M	U	U	Formic Acid, 100%	S		M	Potassium Hydroxide, conc.	S	U	U
Alconox	S	M	M	Gallic Acid	S	S	S	Potassium Permanganate	S		S
Allyl Alcohol	S		S	Glycerol	S	U	M	Rubidium Bromide	S	S	S
Aluminium Chloride	S	S	S	Guanidine Hydrochlorid	S	S	S	Rubidium Chloride	S	S	S
Aluminium Fluorid	S		U	Guanidine Thiocyanate	S	S	S	Silicone Fluids	M	U	
Ammonium Acetate	S	S	S	Hexane	U	U	U	Silver Cyanide	S		S
Ammonium Carbonate	S	S	U	Hydrochlorid Acid, 10%	S	U	S	Silver Nitrate	S	S	S
Ammonium Hydroxid, 10%	S		U	Hydrochlorid Acid, 50%	M	U	M	Sodium Bromide	S	S	S
Ammonium Hydroxid,conc.	S	U	U	Hydrofluoric Acid, 10%	S		M	Sodium Carbonate	S	S	U
Ammonium Sulfate	S	S	S	Hydrofluoric Acid, 100%	S	U	U	Sodium Chloride, 10%	S	S	S
Ammonium Sulfide	S		U	Hydrogen Peroxide, 3%	S	S	S	Sodium Chlorid, sat'd	S	S	S
Amyl Alcohol	M		S	Hydrogen Peroxide, 100%	S	S	S	Sodium Dichromate	S		S
Aniline	U	U	U	Isobutyl Alcohol	S	U	U	Sodium Hydroxide, 1%	S		U
Aqua Regia	U	U	U	Isopropyl Alcohol	S	U	U	Sodium Hydroxide, 10%	S	U	U
Barium Salts	S	S	S	Kerosene	U	U	U	Sodium Hydroxide, conc.	M	U	U
Benzene	U	U	U	Lactic Acid, 20%	S		S	Sodium Hypochlorite	S		S
Benzyl Alcohol	U	U	U	Lauryl Alcohol	S			Sodium Iodide	S		S
Boric Acid	S	S	S	Lead Acetate	S	S		Sodium Metaborate	S		S
n-Butyl Alcohol	S	U	M	Linseed Oil	S	U	U	Sodium Nitrate, 10%	S	S	U
n-Butyl Phtalate	M	U	U	Magensium Chloride	S	S	S	Sodium Sulfate	S	S	S
Calcium Chloride	S	S	S	Magnesium Hydroxide	S		U	Sodium Thiosulfate	S		S
Calcium Hypochloride	S		M	Maleic Acid	S			Sucrose	S	S	S
Carbon Tetrachloride	U	U	U	B-Mercaptoethanol	S	U	U	Sucrose, alkaline	S	U	U
Cesium Acetate	S		S	Mercury	S		U	Sulfuric Acid, 10%	S	S	U
Cesium Bromide	S	S	S	Methanol	S	U	U	Sulfuric Acid, 50%	S	U	U
Cesium Chloride	S	S	S	Methylethylketone	S	U	U	Sulfuric Acid, 75%	S	U	U
Cesium Formate	S	S	S	Methylene Chlorid	S	U	U	Sulfuric Acid, conc.	S	U	U
Cesium Iodide	S	S	S	Mineral Oil	S	U	M	Tannic Acid	S		S
Cesium Sulfate	S	S	S	Nickel Salts	S	S	S	Tetrahydrofuran	U	U	U
Chlorobenzene	U	U	U	Nitric Acid, 10%	S		S	Toluene	U	U	U
Chloroform	M	U	U	Nitric Acid, 50%	S	U	M	Trichloroacetic Acid	S	U	M
Chromic Acid, 10%	S	S	M	Nitric Acid, 95%	M	U	U	Trichloroethane	U	U	U
Chromic Acid, 50%	S	U	U	Oleic Acid	S	U	S	Trichloroethylene	U	U	U
Citric Acid, 10%	S	S	S	Oxalic Acid	S	U	S	Tris Buffer	U	S	S
Cresol Mixture	M	U	U	Paraffin Oil	S	U	M	Trisodium Phosphate	S		S
Cyclohexanol	S	U	M	Petroleum Oils	S		M	Turpentine	M	U	U
Dextran Sulfate	S	S	S	Phenol, 5%	S	U	U	Urea	S	S	S
Dimethylformamide	S	U	U	Phenol, 50%	U	U	U	Urine	S	S	S
Dioxane	M	U	U	Phosphoric Acid, 10%	S		S	Water, distilled	S	S	S
Ethyl Acetate	M	U	U	Phosphoric Acid, conc.	M	U	U	Xylene	U	U	U
Ethyl Alcohol, 50%	S	U	U	Phosphorous Trichloride	S	S	U	Zinc Chloride	S	S	S
Ethyl Alcohol, 95%	S	U	U	Potassium Acetate	S	S	M				
Ethylene Dichloride	M	U	U	Potassium Bromide	S	S	S				
Ethyl Ether	M	U	U	Potassium Carbonate	S	S	S				

Compatibility Key: S = Satisfactory
M = Marginal; performance depends on temperature, run time, speed and rotor type
U = Unsatisfactory; not recommended
PA = Polyallomer; PC = Polyclear; PCB = Polycarbonat