

Centrifuge Ware Chemical Resistance Table

Chemical, Concentration	Resin							O-rings		Closures				
	FEP	PPCO	PC	PE	PP	PSF	PS	SILI	Viton®	PP	ETFE	PE	PPE	
1-(4-Chlorophenyl)ethanone, pure	S	S	M	S	M	M	U	U	U	M	S	S	-	
1,3-Butadiene, pure	S	U	U	U	U	U	U	U	S	U	S	U	U	
1,4-Dioxane, pure	S	M	U	M	M	U	U	U	U	M	M	M	U	
1:3 Mixture Of Nitric And Hydrochloric Acids, pure	S	U	U	U	U	U	U	U	M	U	S2	U	U	
1-Pentanol, pure	S	S	M	M	M	M	S2	U	S	M	S	M	M	
1-Phenylethanone, pure	S	M	U	M	M	U	U	U	U	M	S	M	U	
1-Undecanol, pure	S	S2	M	S	M	M	M	-	S	M	S2	S	-	
2,2,4-Trimethylpentane, pure	S	U	U	U	U	M	U	U	-	U	S2	U	-	
2,2'-Oxybispropane, pure	S	U	U	U	U	U	U	U	U	U	S2	U	-	
2,4,6-Trinitrophenol, pure	S	M	U	U	M	U	U	U	S	M	M	U	S2	
2-Hydroxy-1,2,3-Propanetricarboxylic Acid Tributyl Ester, pure	S	M	U	M	M	U	U	U	U	M	S2	M	U	
2-Hydroxybenzaldehyde, pure	S	S2	M	S	M	M	U	U	M	M	U	S	-	
2-Isopropoxypropane, pure	S	U	U	U	U	U	U	U	U	U	U	S2	U	-
2-Methoxyethanol, pure	S	S	U	S	M	U	U	U	U	M	S2	S	-	
2-Methoxyethyl Oleate, pure	S	S2	U	S	M	U	U	U	-	M	S	S	-	
2-Propanol, pure	S	S	U	S	S	M	S2	S2	S	S	S	S	S2	
2-Propanone, pure	S	M	U	U	M	U	U	U	U	M	M	U	U	
2-Propenenitrile, pure	S	U	U	S	U	U	U	U	U	U	S2	S	U	
3-Phenyl-2-propenal, pure	S	U	M	U	U	M	U	U	U	U	S2	U	-	
4'-Chloroacetophenone, pure	S	S	M	S	M	M	U	U	U	M	S	S	-	
Acetaldehyde, pure	S	M	U	U	M	U	U	U	U	M	M	U	U	
Acetic Acid Benzyl Ester, pure	S	S2	U	M	S	U	U	U	S	S	S2	M	-	
Acetic Acid Phenylmethyl Ester, pure	S	S2	U	M	S	U	U	U	S	S	S2	M	-	
Acetic Anhydride, pure	S	M	U	U	M	U	U	U	U	M	S	U	U	
Acetone, pure	S	M	U	U	M	U	U	U	U	M	S2	U	U	
Acetonitrile, pure	S	U	U	S	M	U	U	U	U	M	S2	S	U	
Acetophenone, pure	S	M	U	M	M	U	U	U	U	M	S	M	U	
Acrylonitrile, pure	S	U	U	S	U	U	U	U	U	U	S2	S	U	
Adipic Acid, pure	S	S	S	S	S	S	S	-	S2	S	S	S	-	
Alanine, pure	S	S	S	S	S	S	S	S2	S	S	S	S	S	
Allyl Alcohol, pure	S	S	M	U	S	M	U	-	S	S	S2	U	-	
Aluminum Chloride, pure	S	S	S2	S	S	S	S	U	S	S	S	S	S	
Aluminum Hydrate, pure	S	S	U	S	S	M	M	S2	S	S	S	S	S	
Aluminum Hydroxide, pure	S	S	U	S	S	M	M	S2	S	S	S	S	S	

Key:

S = Satisfactory, **S1** = Satisfactory, may cause discoloration, **S2** = Satisfactory below 26°C only

M = Marginal; may be satisfactory for use in a centrifuge depending on length of exposure and speed.

Testing under operation conditions is suggested before actual run, **U** = Unsatisfactory; not recommended

Centrifuge Ware Chemical Resistance Table (cont'd)

Chemical, Concentration	Resin							O-rings		Closures			
	FEP	PPCO	PC	PE	PP	PSF	PS	SILI	Viton®	PP	ETFE	PE	PPE
Aluminum Salts, pure	S	S	M	S	S	M	S2	U	M	S	S	S	S2
Aluminum Trihydrate, pure	S	S	U	S	S	M	M	S2	S	S	S	S	S
Amino Acids, pure	S	S	S	S	S	S	S	S2	S	S	S2	S	S
Ammonia, pure	S	S	U	S	S	M	S2	U	U	S	S	S	M
Ammonium Chloride, pure	S	S	S2	S	S	S	S	S2	S2	S	S	S	S2
Ammonium Glycolate, pure	S	S2	M	S	S	M	S	–	S2	S	S	S	–
Ammonium Oxalate, pure	S	S2	S	S	S	S	S	–	–	S	S	S	–
Ammonium Salts, pure	S	S	M	S	S	M	M	S2	M	S	S	S	S2
Amyl Alcohol, pure	S	S	M	M	M	M	S2	U	S	M	S	M	M
Amyl Chloride, pure	S	U	U	U	U	U	U	U	U	U	S	U	U
Aniline, pure	S	U	U	U	M	U	U	U	U	M	M	U	U
Aqua Regia, pure	S	U	U	U	U	U	U	U	U	U	S2	U	U
Arsenic Acid, pure	S	M	S	S	S	S	S	S2	S	S	S	S	M
Benzaldehyde, pure	S	M	U	U	M	U	U	U	U	M	M	U	U
Benzenamine, pure	S	U	U	U	M	U	U	U	U	M	M	U	U
Benzene, pure	S	U	U	U	U	U	U	U	U	S	U	S2	U
Benzol, pure	S	U	U	U	U	U	U	U	U	S	U	S2	U
Benzyl Acetate, pure	S	S2	U	M	S	U	U	U	S	S	S	S2	M
Benzyl Alcohol, pure	S	U	U	U	M	U	U	U	S	M	S	U	–
Boric Acid, pure	S	S	S	S	S	S	S	S2	S	S	S	S	S
Bromine, pure	S	U	U	U	U	U	U	U	U	U	S2	U	U
Bromoform, pure	S	U	U	U	U	U	U	U	S	U	M	U	–
Butadiene, pure	S	U	U	U	U	U	U	U	S	U	S	U	U
Butyl Acetate, pure	S	M	U	U	U	U	U	U	U	U	U	S2	U
Butyl Chloride, pure	S	U	U	U	U	U	U	U	–	U	S	U	U
Butyl Citrate, pure	S	M	U	M	M	U	U	U	U	M	S2	M	U
Butyric Acid, pure	S	U	U	U	U	M	U	U	M	U	S	U	–
Calcium Chloride, pure	S	S	S	S	S1	S	S	S2	S	S1	S	S	S
Calcium Hypochlorite, Saturated	S	S	U	S	S	M	S2	U	S	S	S	S	M
Carbazole, pure	S	S	U	S	S	U	S	–	–	S	S	S	–
Carbon Disulfide, pure	S	U	U	U	M	U	U	U	S	M	M	U	U
Carbon Tetrachloride, pure	S	U	U	U	U	U	U	U	S	U	S	U	U
Cedarwood Oil, pure	S	U	M	U	U	M	U	U	S	U	S2	U	–
Cellosolve® Acetate, pure	S	S2	U	S	M	U	U	U	U	M	S2	S	–
Chlorobenzene, pure	S	U	U	U	U	U	U	U	S	U	M	U	U
Chloroform, pure	S	U	U	U	U	U	U	U	S	U	M	U	U

Key:

S = Satisfactory, **S1** = Satisfactory, may cause discoloration, **S2** = Satisfactory below 26°C only

M = Marginal; may be satisfactory for use in a centrifuge depending on length of exposure and speed.

Testing under operation conditions is suggested before actual run, **U** = Unsatisfactory; not recommended

Centrifuge Ware Chemical Resistance Table (cont'd)

Chemical, Concentration	Resin							O-rings		Closures			
	FEP	PPCO	PC	PE	PP	PSF	PS	SILI	Viton®	PP	ETFE	PE	PPE
Cinnamaldehyde, pure	S	U	M	U	U	M	U	U	U	U	S	2	-
Cinnamic Aldehyde, pure	S	U	M	U	U	M	U	U	U	U	S2	U	-
Cinnamon Oil, pure	S	M	M	U	U	M	U	U	U	U	S2	U	-
Copper Sulfate, pure	S	S	S	S	S	S	S	S2	M	S	S	S	S
Cresol, pure	S	M	U	U	U	U	U	U	U	U	S2	U	U
Cyanoethylene, pure	S	U	U	S	U	U	U	U	U	U	S2	S	U
Cyclohexane, pure	S	M	M	M	M	M	U	U	S2	M	S2	M	U
Cyclohexanone, pure	S	U	U	M	M	U	U	U	U	M	S	M	U
Cyclopentane, pure	S	U	U	U	U	U	U	U	S	U	S	U	U
Decahydronaphthalene, pure	S	U	U	M	U	U	U	U	S	U	S	M	U
Decalin, pure	S	U	U	M	U	U	U	U	S	U	S	M	U
Diacetone Alcohol, pure	S	M	U	S	M	U	M	U	U	M	S2	S	-
Diacetone, pure	S	M	U	U	S2	U	U	U	U	S2	S2	U	U
Dibutyl Phthalate, pure	S	M	M	U	M	M	U	U	M	M	M	U	U
Diethyl Benzene, pure	S	U	U	U	U	U	U	U	S	U	S2	U	-
Diethyl Ether, pure	S	U	U	U	U	U	U	U	U	U	S2	U	U
Diethyl Ketone, pure	S	M	U	U	M	U	U	U	U	M	M	U	U
Diethyl Malonate, pure	S	S	U	S	S	U	U	U	U	S	S	S	-
Diethylamine, pure	S	M	U	U	M	M	M	U	U	M	U	U	-
Diethylene Dioxide, pure	S	M	U	M	M	U	U	U	U	M	M	M	U
Diethylene Glycol Monoethyl Ether, pure	S	S	U	S	S	M	U	U	M	S	S	S	-
Diethylene Glycol, pure	S	S	M	S	S	M	S2	U	S	S	S	S	-
Diisopropyl Ether, pure	S	U	U	U	U	U	U	U	U	U	S2	U	-
Dimethyl Acetamide, pure	S	S	U	M	S	U	U	U	U	S	S2	M	-
Dimethyl Formamide, pure	S	S	U	S	S	U	U	U	U	S	M	S	U
Dimethyl Ketone, pure	S	M	U	U	M	U	U	U	U	M	M	U	U
Dimethylsulfoxide, pure	S	S	U	S	S	U	U	U	U	S	S2	S	S
Dioxane, pure	S	M	U	M	M	U	U	U	U	M	M	M	U
DIPE, pure	S	U	U	U	U	U	U	U	U	U	S2	U	-
Dipropylene Glycol, pure	S	S	M	S	S	M	S	U	S	S	S	S	S2
DMSO, pure	S	S	U	S	S	U	M	U	U	S	S2	S	S
Ether, pure	S	U	U	U	U	U	U	U	U	U	S2	U	U
Ethyl Acetate, pure	S	M	U	M	M	U	U	U	U	M	S2	M	U
Ethyl Alcohol, pure	S	S	U	M	S	S2	M	U	S	S	S	M	S
Ethyl Benzene, pure	S	U	U	U	U	U	U	U	S	U	M	U	U

Key:

S = Satisfactory, **S1** = Satisfactory, may cause discoloration, **S2** = Satisfactory below 26°C only

M = Marginal; may be satisfactory for use in a centrifuge depending on length of exposure and speed.

Testing under operation conditions is suggested before actual run, **U** = Unsatisfactory; not recommended

Centrifuge Ware Chemical Resistance Table (cont'd)

Chemical, Concentration	Resin							O-rings		Closures			
	FEP	PPCO	PC	PE	PP	PSF	PS	SILI	Viton®	PP	ETFE	PE	PPE
Ethyl Benzoate, pure	S	M	U	U	M	U	U	U	U	M	S2	U	U
Ethyl Butyrate, pure	S	M	U	M	M	U	U	U	U	M	S2	M	-
Ethyl Chloride, pure	S	U	U	U	U	U	U	U	S	U	S	U	U
Ethyl Cyanoacetate, pure	S	S	U	S	S	U	M	U	-	S	S	S	-
Ethyl Lactate, pure	S	S	U	S	S	U	U	U	U	S	S	S	-
Ethylene Chloride, pure	S	U	U	U	U	U	U	U	M	U	U	U	U
Ethylene Glycol Monomethyl Ether, pure	S	S	U	S	M	U	U	U	U	M	S2	S	-
Ethylene Glycol, pure	S	S	U	S	S	M	S	S2	S	S	S	S	S2
Ethylene Oxide, pure	S	U	U	U	M	U	U	U	U	M	S2	U	S2
EtO, pure	S	S	U	S	S	U	U	U	U	S	S	S	S2
Fatty Acids, Saturated, pure	S	S2	M	S	S	M	S2	U	S	S	S	S	S2
Fatty Acids, Unsaturated, pure	S	S2	M	S	S	M	M	U	S	S	S	S	S2
Fluorides, pure	S	S	S	S	S	S	M	U	M	S	S	S	S2
Formic Acid, pure	S	S2	U	M	S	M	U	U	M	S	S	M	S
Freon TF, pure	S	S2	M	S	M	M	U	U	M	M	S2	S	-
Fuel Oil No. 1, pure	S	M	S2	U	M	S2	U	U	S	M	S	U	U
Gasoline, pure	S	U	U	M	U	U	U	U	S	U	S	M	U
Glutaraldehyde Disinfectant, pure	S	S	M	S	S	M	M	U	M	S	S2	S	S
Glutaraldehyde, pure	S	S	M	S	S	M	M	U	U	S	S2	S	S
Glycerine, pure	S	S	S	S	S	S	S	S2	S	S	S	S	S
Glycerol, pure	S	S	S	S	S	S	S	S2	S	S	S	S	S
Hexane, pure	S	M	U	U	M	U	U	U	S	M	S2	U	U
Hydrated Alumina, pure	S	S	U	S	S	M	M	S2	S	S	S	S	S
Hydrazine, pure	S	U	U	U	U	U	U	U	S	U	U	U	-
Iodine Crystals, pure	S1	U	S1	U	S1	S1	S1	U	S	S1	S2	U	U
Isobutanol, pure	S	S	S2	S	S	S2	S2	S2	S	S	S	S	S
iso-Butyl Alcohol, pure	S	S	S2	S	S	S2	S2	S2	S	S	S	S	S
Isopropanol, pure	S	S	U	S	S	M	S2	S2	S	S	S	S	S2
Isopropyl Acetate, pure	S	M	U	M	M	U	U	U	U	M	S2	M	-
Isopropyl Alcohol, pure	S	S	U	S	S	M	S2	S2	S	S	S	S	S2
Isopropyl Benzene, pure	S	U	U	U	U	U	U	U	S	U	S2	U	-
Isopropyl Ether, pure	S	U	U	U	U	U	U	U	U	U	S2	U	-
Jet Fuel, pure	S	U	M	U	U	M	M	U	S	U	S2	U	M
Kerosene, pure	S	M	S2	U	M	S2	U	U	S	M	S	U	U
Lacquer Thinner, pure	S	U	U	U	U	U	U	U	U	U	S	U	U

Key:

S = Satisfactory, **S1** = Satisfactory, may cause discoloration, **S2** = Satisfactory below 26°C only

M = Marginal; may be satisfactory for use in a centrifuge depending on length of exposure and speed.

Testing under operation conditions is suggested before actual run, **U** = Unsatisfactory; not recommended

Centrifuge Ware Chemical Resistance Table (cont'd)

Chemical, Concentration	Resin							O-rings		Closures			
	FEP	PPCO	PC	PE	PP	PSF	PS	SILI	Viton®	PP	ETFE	PE	PPE
L-alpha-amino Propionic Acid, pure	S	S	S	S	S	S	S	S2	S	S	S	S	S
Lead Acetate, pure	S	S	S	S	S	S	S	U	M	S	S	S	S
L-Tartaric Acid, pure	S	S2	S2	M	S	S	S	S2	S	S	S	M	S2
Magnesium Chloride, pure	S	S	S	S	S	S	S	S2	S	S	S	S	S
MEK, pure	S	S2	U	U	M	U	U	U	U	M	M	U	U
Mercuric Chloride, pure	S	S	S	S	S	S	S2	M	S	S	S	S	S
Methoxyethyl Oleate, pure	S	S2	U	S	M	U	U	U	—	M	S	S	—
Methyl Acetate, pure	S	M	U	U	M	U	U	U	U	M	S2	U	U
Methyl Alcohol, pure	S	S	M	M	S1	S2	U	S2	M	S1	S	M	S
Methyl Ethyl Ketone, pure	S	S2	U	U	M	U	U	U	U	M	M	U	U
Methyl Isobutyl Ketone, pure	S	M	U	U	S2	U	U	U	U	S2	S2	U	U
Methyl Propyl Ketone, pure	S	M	U	U	M	U	U	U	U	M	S2	U	U
Methylene Chloride, pure	S	U	U	U	U	U	U	U	S	U	U	U	U
Methyloxirane, pure	S	U	U	U	M	U	U	U	U	M	S	U	S2
Methyl-t-Butyl Ether, pure	S	U	U	U	U	U	U	U	U	M	S2	U	—
MIBK, pure	S	M	U	U	S2	U	U	U	U	S2	S2	U	U
Mineral Spirits, pure	S	U	U	U	U	U	U	M	U	S	U	S2	U
n-Butanol, pure	S	S	M	S	S	M	S2	U	S	S	S	S	M
n-Butyl Acetate, pure	S	M	U	M	U	U	U	U	U	U	S2	M	U
n-Butyl Alcohol, pure	S	S	M	S	S	M	S2	U	S	S	S	S	M
n-Decane, pure	S	U	U	M	M	M	U	U	S	M	S	M	—
n-Heptane, pure	S	U	U	U	U	M	U	U	S	U	S	U	U
Nitrobenzene, pure	S	U	U	U	M	U	U	U	U	M	S2	U	U
Nitromethane, pure	S	U	U	U	U	U	U	U	U	U	M	U	U
n-Octane, pure	S	S2	M	U	U	M	U	U	S	U	S	U	U
Oil, Cedarwood, pure	S	U	U	U	U	U	U	U	S	U	S2	U	—
Oil, Cinnamon, pure	S	M	M	U	U	M	U	U	U	U	S2	U	—
Oil, Mineral, pure	S	S2	S2	U	U	S2	M	S2	S	U	S	U	S2
Oil, Orange, pure	S	M	U	U	M	M	U	U	S	M	S	U	—
Oil, Pine, pure	S	M	U	U	M	U	U	U	S	M	S2	U	—
Orange Oil, pure	S	M	U	U	M	M	U	U	S	M	S	U	—
Orthoarsenic Acid, pure	S	M	S	S	S	S	S	S2	S	S	S	S	S2
Ozone, pure	S	S2	U	M	U	S	U	S2	S2	U	S	M	U
p-Chloroacetophenone, pure	S	S	M	S	M	M	U	U	U	M	S	S	—
p-Dichlorobenzene, pure	S	U	U	U	U	U	U	U	U	U	U	U	U

Key:

S = Satisfactory, **S1** = Satisfactory, may cause discoloration, **S2** = Satisfactory below 26°C only

M = Marginal; may be satisfactory for use in a centrifuge depending on length of exposure and speed.

Testing under operation conditions is suggested before actual run, **U** = Unsatisfactory; not recommended

Centrifuge Ware Chemical Resistance Table (cont'd)

Chemical, Concentration	Resin							O-rings		Closures			
	FEP	PPCO	PC	PE	PP	PSF	PS	SILI	Viton®	PP	ETFE	PE	PPE
Pentyl acetate, pure	S	M	U	S	M	U	U	U	U	M	S	S	U
Perchloric Acid, pure	U	M	U	U	M	U	U	U	S	M	M	U	M
Perchloroethylene, pure	S	U	U	U	U	U	U	U	S	U	S2	U	-
Petroleum, pure	S	M	M	U	U	S2	U	U	S	U	S	U	S2
Phenyl Methyl Ketone, pure	S	M	U	M	M	U	U	U	U	M	S	M	U
Phenylacrolein, pure	S	U	M	U	U	M	U	U	U	U	S2	U	-
Picric Acid, pure	S	M	U	U	M	U	U	U	S	M	M	U	S2
Pine Oil, pure	S	M	U	U	M	U	U	U	S	M	S2	U	-
Potassium Chloride, pure	S	S	S	S	S	S	S	S2	S	S	S	S	S
Potassium Permanganate, pure	S	S1	S1	S	S1	S1	S2	S2	S2	S1	S	S	S
Propane, pure	S	S	S	S	S	S	U	S2	S	S	S	S	M
Propionic Acid, pure	S	S2	U	M	M	M	M	-	-	M	M	M	-
Propylene Glycol, pure	S	S	M	S	S	M	S	S2	S	S	S	S	S2
Pyridine, pure	S	U	U	U	U	U	U	U	U	U	U	U	U
Salicylaldehyde, pure	S	S2	M	S	M	M	U	U	M	M	U	S	-
sec-Butanol, pure	S	S	S2	S	S	S2	S2	S2	S	S	S	S	S
sec-Butyl Alcohol, pure	S	S	S2	S	S	S2	S2	S2	S	S	S	S	S
Silicone Oil, pure	S	S	S	S	S	S	S2	U	S	S	S	S	S2
Silver Acetate, pure	S	S	S2	S	S	S	S	U	S	S	S	S	S
Silver Nitrate, pure	S	S1	S	S	S1	S	S	S2	S	S1	S	S	S1
Skydrol LD4 Aviation Hydraulic Fluid,pure	S	M	U	M	M	U	U	U	S	M	S	M	-
Soda Ash, pure	S	S	M	M	S1	S	S2	S2	S	S1	S	M	S
Sodium Acetate, pure	S	S	S2	S	S	S	S	U	U	S	S	S	S
Sodium Carbonate, pure	S	S	M	M	S1	S	S2	S2	S	S1	S	M	S
Sodium Dichromate, pure	S	S	S	S	S	S	M	S2	S	S	S	S	-
Stearic Acid, pure	S	S	M	M	S2	S2	S2	U	S	S2	S	M	S2
Sulfur Dioxide, pure	S	S	M	S	S	M	U	U	S2	S	S	S	U
Sulfur Salts, pure	S	U	U	M	M	M	U	U	M	M	S2	M	M
Tartaric Acid, pure	S	S2	S2	M	S	S	S	S2	S	S	S	M	S2
TCA, pure	S	S	U	S2	S	U	U	U	U	S	M	S2	S
tert-Butanol, pure	S	S	M	S	S	M	S2	U	S	S	S	S	S
tert-Butyl Alcohol, pure	S	S	M	S	S	M	S2	U	S	S	S	S	S
Tetrahydrofuran, pure	S	M	U	U	U	U	U	U	U	U	U	U	U
THF, pure	S	M	U	U	U	U	U	U	U	U	U	U	U
Thionyl Chloride, pure	S	U	U	U	U	U	U	-	M	U	S2	U	-

Key:

S = Satisfactory, **S1** = Satisfactory, may cause discoloration, **S2** = Satisfactory below 26°C only

M = Marginal; may be satisfactory for use in a centrifuge depending on length of exposure and speed.

Testing under operation conditions is suggested before actual run, **U** = Unsatisfactory; not recommended

Centrifuge Ware Chemical Resistance Table (cont'd)

Chemical, Concentration	Resin							O-rings		Closures			
	FEP	PPCO	PC	PE	PP	PSF	PS	SILI	Viton®	PP	ETFE	PE	PPE
Tincture of Iodine, pure	S1	U	S1	S2	S1	S1	M	U	S	S1	S	S2	S1
Toluene, pure	S	U	U	U	U	U	U	U	U	U	S2	U	U
Tribromomethane, pure	S	U	U	U	U	U	U	U	S	U	M	U	-
Tributyl Citrate, pure	S	M	U	M	M	U	U	U	U	M	S2	M	U
Trichloroacetic Acid, pure	S	S	U	S2	S	U	U	U	U	S	M	S2	S2
Trichloroethane, pure	S	U	U	U	U	U	U	U	S	U	S	U	U
Trichloroethylene, pure	S	U	U	U	U	U	U	U	S	U	U	U	U
Triethylene Glycol, pure	S	-	S2	S	S	S2	S2	-	S	S	S	S	-
Tripropylene Glycol, pure	S	S	S2	S	S	S	S	S2	S	S	S	S	S2
Tris Buffer Solution, pH 11, pure	S	S	U	S	S	S	S2	S2	S	S	S	S	S2
Tris Buffer Solution, pH 7.0, pure	S	S	M	S	S	S	S2	S2	S	S	S	S	S
Trisodium Phosphate, pure	S	S	M	S	S	M	S	S2	S	S	S	S	S2
Tung Oil, pure	S	-	-	S	S2	-	U	S2	S	S2	S	S	-
Tung Oil, pure	S	-	-	S	S2	-	U	S2	S	S2	S	S	-
Undecyl Alcohol, pure	S	S2	M	S	M	M	M	-	S	M	S2	S	-
Urea, pure	S	S	U	S	S	S	S	M	S	S	S	S	S
Vinyl Cyanide, pure	S	U	U	S	U	U	U	U	U	U	S2	S	U
White Spirits, pure	S	U	U	U	U	U	M	U	S	U	S2	U	-
Xylene, pure	S	U	U	U	U	U	U	U	S	U	S	U	U
Zinc Stearate, pure	S	S	S	S	S	S	S	-	S	S	S	S	S

Key:

S = Satisfactory, **S1** = Satisfactory, may cause discoloration, **S2** = Satisfactory below 26°C only

M = Marginal; may be satisfactory for use in a centrifuge depending on length of exposure and speed.

Testing under operation conditions is suggested before actual run, **U** = Unsatisfactory; not recommended

Disclaimer: This Centrifuge Ware Chemical Resistance Table is a general guide and pertains to Thermo Scientific™ Nalgene™ and Nunc™ centrifuge ware. As so many factors can affect the chemical resistance of a given product, you should test under your own conditions. Compatibility recommendations are given at room or ambient temperature conditions. The listing is intended as a guide for selecting the appropriate Nalgene and Nunc centrifuge ware with the most common chemicals used in life science research. This information is based on technical publications, laboratory experiments, data from material suppliers and field tests. Thermo Fisher recommends that compatibility be established by the customer in their specific application and storage temperature because the actual performance may differ as a result of variations in temperature, concentration, exposure time, and other factors. Product information contained within this Centrifuge Ware Chemical Resistance Table is provided to the best of our knowledge and belief, but without obligation or liability. This Chemical Compatibility Table is not a product warranty statement. Any information or advice provided by Thermo Fisher Scientific in this Centrifuge Ware Chemical Resistance Table is for reference purposes only.

Find out more at thermofisher.com/centrifugeware

ThermoFisher
SCIENTIFIC