

Chemical Compatibility Guide for Thermo Scientific Sample Storage Products

Chemical or Solution	Tubes					Septum Caps	Gasket	Plates		Accessories				
	Matrix 2D Barcoded Open Top & Screw-top Tubes (PP)	Matrix 2D Barcoded Glass Tubes (Glass)	Nunc Universal, Cryobank & Bank-it Tubes (PP)	Nunc Biobanking & Cell Culture Tubes & Long Term Storage Tubes (PP)	Nalgene General Long-Term Storage Cryogenic Tubes (PP)	Matrix DuraSeal and SeptraSeal Closures (TPV)	Screw Cap Gasket (TPE*)	Nunc Storage Micro-plates (PP)	Abgene Storage Plates (PP)	Latch Racks (PC) for Matrix 2D Screw-top, Nunc Universal & Nunc Cryobank Tubes (excludes PP latches)	Latch Racks for Matrix Open Top Tubes (PP)	Nalgene & Nunc Polycarbonate Cryoboxes (PC)	Color Coders for Nalgene General Long Term Storage Cryogenic & Nunc Biobanking & Cell Culture Tubes (PS)	Matrix & Nunc 2D Barcodes (PP)
Acids	During proper use, materials come into direct contact with solutions listed in left column									During proper use, materials are not in direct contact with solutions**				
Hydrochloric acid (25%)	R	R	R	R	R	R	R	R	R	LR	R	LR	R	R
Nitric acid (25%)	NR	R	NR	NR	NR	NR	NR	NR	NR	LR	LR	LR	LR	LR
Alcohols														
Butanol	R	R	R	R	R	NR	NR	R	R	R	R	R	R	R
Ethanol (100%)	R	R	R	R	R	R	R	R	R	R	R	R	R	R
Methanol	R	R	R	R	R	R	R	R	R	R	R	R	LR	R
Amines														
Aniline	R	R	R	R	R	NR	NR	R	R	NR	R	NR	NR	R
Dimethylformamide	R	R	R	R	R	NR	NR	R	R	NR	R	NR	NR	R
Bases														
Ammonium hydroxide (25%)	R	R	R	R	R	R	R	R	R	NR	R	NR	R	R
Ammonium hydroxide (1N)	R	R	R	R	R	R	R	R	R	LR	R	LR	R	R
Sodium hydroxide	R	R	R	R	R	R	R	R	R	NR	R	NR	R	R
Hydrocarbons														
Hexane	R	R	R	R	R	NR	NR	R	R	LR	R	LR	NR	R
Toluene	NR	R	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Xylene	NR	R	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Dioxane	LR	R	LR	LR	LR	NR	NR	LR	LR	NR	LR	NR	NR	LR
Dimethylsulfoxide (DMSO) (100%)	R	R	R	R	R	LR	LR	R	R	NR	R	NR	NR	R
Dimethylsulfoxide (DMSO) (10%)	R	R	R	R	R	R	R	R	R	R	R	R	R	R
Halogenated Hydrocarbons														
Chloroform	NR	R	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Methylene chloride	NR	R	NR	NR	NR	NR	NR	NR	NR	NR	LR	NR	NR	LR
Ketones														
Acetone	LR	LR	LR	LR	LR	NR	NR	LR	LR	NR	R	NR	NR	R
Methyl ethyl diketone	R	R	R	R	R	NR	NR	R	R	NR	R	NR	NR	R
Common Aqueous Solutions														
Glycerol	R	R	R	R	R	R	R	R	R	R	R	R	R	R
PEG	R	R	R	R	R	R	R	R	R	R	R	R	R	R
PBS	R	R	R	R	R	R	R	R	R	R	R	R	R	R
Acetonitrile	R	R	R	R	R	NR	NR	R	R	NR	R	NR	NR	R
TE (Tris-EDTA)	R	R	R	R	R	R	R	R	R	R	R	R	R	R
DEPC	R	R	R	R	R	LR	LR	R	R	LR	R	LR	LR	R

Legend	
R	Recommended. Product material is recommended for use with chemical or solution.
LR	Limited. Product material shows limited compatibility with the chemical or solution. Testing is highly recommended for your specific application.
NR	Not Recommended. Product material is not recommended for use with chemical or solution.

PS	Polystyrene
PP	Polypropylene
PC	Polycarbonate
TPE	Thermoplastic elastomer
TPV	Thermoplastic vulcanizate

* Includes only TPE resins manufactured for Thermo Scientific sample storage products and not all TPE resins. For a list of specific TPE resins contact ROCREGsupport@thermofisher.com

**These materials are peripheral to sample storage tubes and would not be storing or coming into direct contact with the solutions listed. Recommendation guidelines above are based on direct contact.

Disclaimer: This Chemical Compatibility Guide is a general guide and pertains to Thermo Scientific sample storage products only. Because 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 Thermo Scientific sample storage component 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 Chemical Compatibility Guide is provided to the best of our knowledge and belief, but without obligation or liability. This Chemical Compatibility Guide is not a product warranty statement. Any information or advice provided by Thermo Fisher Scientific in this Chemical Compatibility Guide is for reference purposes only.

