

Air Monitoring Thermal Desorption Tubes

Thermal Desorption Tubes for DYNATHERM Instruments

Supelco offers a complete line of both prepacked and empty tubes for the DYNATHERM Thermal Desorbers. Each tube is individually numbered, thermally conditioned, and batch tested for back-pressure and background. The prepacked Standard Sampling Tubes are sealed in our exclusive TDS storage containers and the Fast-Flow Tubes are sealed with Swagelok fittings. All of the prepacked sampling tubes incorporate a glass frit at the inlet, which increases their performance. The Focusing Tubes are used to refocus the sample for better chromatography of the early eluting compounds.

DYNATHERM Standard Sampling Tubes

Fits: Models 850 / 890 TDU and ACEM-900 and MTDU.

TUBE	QTY	CAT. NO.	PRICE
6mm OD x 4.5" Long, 4mm ID			
Cabotrap 100	1	20872	
Cabotrap 150	1	20381	
Carbotrap 200	1	20873	
Carbotrap 217	1	20895-U	
Carbotrap 300	1	20875	
Carbotrap 302	1	20356	
Carbotrap 317	1	20877	
Carbotrap 349	1	20243	
Carbotrap 400	1	20882	
Tenax TA	1	20896-U	
Empty fritted tubes	3	20380-U	
Empty non-fritted tubes	5	20235-U	

Note: Tubes listed above also fit the OI Analytical Air Tube Desorber or DMP-16.

DYNATHERM Fast-Flow Sampling Tubes

These tubes have a 7mm ID that allow faster flow rates to pass through the tubes while sampling. Fits only ACEM-900 and MTDU equipped with the fast-flow option ("FF" designation). Sealed using Swagelok fittings.

TUBE	QTY	CAT. NO.	PRICE
10mm OD x 4.5" Long (6mm OD Ends) 7mm ID			
Carbotrap 217	1	20724	
Carbotrap 317	1	20881	
Tenax TA	1	20894	
Empty fritted FF Tube	1	20893-U	

DYNATHERM Focusing Tubes

TUBE	QTY	CAT. NO.	PRICE
FITS: MODEL 850 / 890 TDU			
6mm OD x 4.5" Long 2mm ID			
Carbotrap 200	1	20244	
Carbotrap 300	1	20382	
Carbotrap 370	1	20373	
Empty tube w/taper	3	20386	
Empty tube straight bore	5	20237	
6mm OD x 4.5" Long 1mm ID			
Carbotrap 201	1	20361	
Carbotrap 301	1	20354	
Empty tube w/taper	3	20385	
FITS: ACEM-900			
6mm OD x 7.25" Long 1mm ID			
Carbotrap 201	1	20865	
Empty tube w/taper	1	20892-U	



Tube Conditioning Units

These units allow you to re-condition your DYNATHERM Standard Tubes (6mm OD x 11.5cm long)

DESCRIPTION	CAT. NO.	PRICE
Single-Tube Conditioning Unit, 115 VAC	22832	
Six-Tube Conditioning Unit, 115 VAC	22833	



VOST Stack Sampling Tubes

VOST Tubes (Volatile Organic Sampling Train) are designed to meet the specifications in US EPA SW-846, Method 0030. Each tube is individually numbered, pre-conditioned, and sealed with stainless steel Swagelok fitting before being placed in a glass storage container. Each lot is tested for background and backpressure. 16mm OD x 5" Long (1/4" OD Ends)

TUBE	QTY	CAT. NO.	PRICE
VOST 100			
Tenax TA 35/60 mesh	1	20074-U	
VOST 200			
Tenax TA:Petroleum Charcoal, 2:1	1	20075-U	
Empty VOST Tube	1	21993	
VOST Storage Container (Screw Cap Glass)	1	21998	

Order: 1.800.325.3010 Technical Service: 1.800.359.3041 Web: www.sigma-aldrich.com/supelco

Sample
Preparation

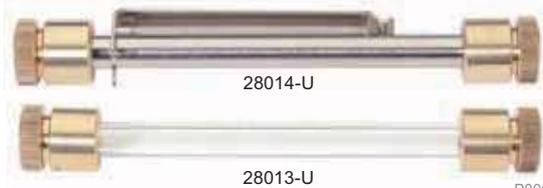
SUPELCO

Air Monitoring Thermal Desorption Tubes

Thermal Desorption Tubes PerkinElmer Instruments

Supelco offers both Stainless Steel and Glass prepacked sampling tubes that are fully compatible with the ATD-50 the ATD-400 and the new TurboMatrix™ instrument. Each tube has a unique number. The tubes are thermal conditioned and tested for background and backpressure. The tubes are sold in packs of 10. Each tube is sealed with Swagelok fittings.

Fits: ATD-50, ATD-400 and TurboMatrix. 1/4" OD x 3.5" Long. Stainless steel 5mm ID, glass 4mm ID.



P000802-3

TUBE	QTY	CAT. NO.	PRICE
STAINLESS STEEL			
Cabotrap-100 (Carbotrap- B)	10	25052	
Cabotrap-202	10	25058-U	
Carbotrap-300	10	25050	
Carbotrap-349	10	25057-U	
Air Toxics™	10	25051	
Carbosieve SIII*	10	25053	
Tenax GR	10	25054	
Tenax TA	10	25055	
Chromosorb-106	10	25056-U	
Empty Tubes			
Empty Tube without caps	1	25049	
Empty Tubes with TMX Brass Storage Caps	10	28014-U	
Empty Tubes with TMX Brass Storage Caps	50	28015-U	
GLASS			
Cabotrap 100 (Carbotrap B)	10	25087	
Cabotrap 202	10	25093-U	
Carbotrap 300	10	25085	
Carbotrap 349	10	25092-U	
Air Toxics™	10	25086	
Carbosieve S-III™	10	25088	
Tenax GR	10	25089	
Tenax TA	10	25090-U	
Chromosorb 106	10	25091	
Empty Tubes			
Empty Tube without caps	1	25084	
Empty Tubes with TMX Brass Storage Caps	10	28013-U	

Accessories for PerkinElmer Thermal Desorption Tubes

TUBE	QTY	CAT. NO.	PRICE
PASSIVE SAMPLING ACCESSORIES (STAINLESS STEEL TUBES ONLY)			
Diffusion Caps (Standard)	10	28017-U	
Diffusion Caps (w/ Silicone Membrane)	10	28018-U	
Pen Clips	10	28016-U	
STORAGE END CAPS (FITS GLASS OR SS TUBES)			
PTFE Storage End Caps for ATD-400	20	28019-U	
Brass Storage End Caps for TurboMatrix	20	28011-U	
Replacement PFA Ferrules for Brass Storage Caps	20	28012-U	

Thermal Desorption Tubes for Tekmar-Dohrmann Instruments

Supelco offers both stainless steel and glass prepacked tubes for the Tekmar-Dohrman Instruments. The prepacked tubes are thermally conditioned and tested for background levels and backpressure. The 1/4" OD tubes are sealed in our exclusive TDS3 storage container. The 1/2" OD tubes are sealed in glass storage container.

Fits: AEROTrap 6000



P000848

TUBE	QTY	CAT. NO.	PRICE
STAINLESS STEEL, 1/4" OD X 7" LONG, 5mm ID			
Carbotrap-100	1	20241	
Carbotrap-300	1	20370-U	
Tenax TA	1	20913-U	
Empty Tube	1	20920-U	
GLASS, 1/4" OD X 7" LONG, 4mm ID			
Carbotrap-300	1	20912-U	
Tenax TA	1	20970-U	
Empty Tube	1	20918	
STAINLESS STEEL, 1/2" OD X 7" LONG, 12mm ID			
Tenax TA	1	20984	
Empty Tube	1	20924	
Glass Storage Container	1	20853	
GLASS, 1/2" OD X 7" LONG, 10mm ID			
Carbotrap-300	1	20983	
Tenax TA	1	20988	
Empty Tube	1	20922	
Glass Storage Container	1	20853	



Air Monitoring

Thermal Desorption Tubes and Storage Containers

Thermal Desorption Tubes for the GERSTEL ThermoDesorption System

Supelco offers both stainless steel and glass prepacked sampling tubes that are fully compatible with the GERSTEL instrument. Each tube is thermally conditioned, and batch tested for back pressure and background. The prepacked tubes are sealed in our exclusive TDS storage containers. All of the prepacked glass sampling tubes incorporate a glass frit at the inlet, which increases their performance, and are individually numbered. The stainless steel tubes use a SS screen at both inlet and outlet to keep the adsorbent beds secure during use. Fits: Models TDS A & TDS 2.

6mm OD x 7" Long, 4mm ID

TUBE	QTY	CAT. NO.	PRICE
STAINLESS STEEL			
Carbotrap 300	1	28273-U	
Carbosieve S-III	1	28274-U	
Tenax GR	1	28272-U	
Tenax TA	1	28271-U	
Chromosorb 106	1	28275-U	
Empty non-fritted tubes	1	28276-U	
Stainless Steel Screens (Fits both SS & glass tubes)	10	28277-U	
GLASS			
Carbotrap 300	1	28283-U	
Carbosieve S-III	1	28284-U	
Tenax GR	1	28282-U	
Tenax TA	1	28281-U	
Chromosorb 106	1	28285-U	
Empty fritted tubes	1	28286-U	
Empty non-fritted tubes ¹	1	28287-U	
Stainless Steel Screens (Fits both SS & glass tubes)	10	28277-U	

¹ Stainless Steel tube includes 2 SS screens

TDS³ Thermal Desorption Storage Containers

Use our TDS storage sampling system to simplify the Thermal Desorption sample prep process. The TDS storage containers will maintain the sample integrity of both the tubes to be sampled or those which already have a sample adsorbed. The optional Sampling Caps convert the TDS storage container into a convenient tube holder that makes connecting the tube to the sampling pump very easy.

MANUFACTURER	TUBE DIMENSIONS		CAT. NO.	PRICE
	OD X LENGTH			
Perkin-Elmer	1/4" x 3.5"	(8.9cm)	25097-U	
Markes Int'l Ltd.	1/4" x 3.5"	(8.9cm)	25097-U	
Dynatherm**	6mm x 4.5"	(11.5cm)	25096-U	
Entech	6mm x 4.5"	(11.5cm)	25096-U	
OI Analytical	1/4" (6mm) x 4.5"	(11.5cm)	25096-U	
Chrompack	6mm x 6.3"	(16.0cm)	25098-U	
Gerstel	6mm X 7"	(17.8cm)	25095-U	
Tekmar	1/4" X 7"	(17.8cm)	25095-U	
Dynatherm***	6mm x 7.25"	(18.4cm)*	25099-U	
CDS Analytical	1/4" x 8"	(20.3cm)	25100-U	
Envirochem	6mm x 8"	(20.3 cm)	25100-U	

Each TDS container includes 10 replacement septa.

* Refocusing tube only.

** Standard sampling tubes

*** ACEM-900 focusing tube

Accessories for TDS³ Storage Containers

TUBE	QTY	CAT. NO.	PRICE
Replacement Septa for Storage Caps	50	25073	
Sampling Caps Set (Includes one Inlet and one Outlet cap)	1	25069	
Adapters for Hose Connections			
Luer to Hose Barb For 1/4" Tubing	10	24856	
Luer to Hose Barb For 3/16" Tubing	20	23364	
Luer to Hose Barb For 1/8" Tubing	20	21016	
Luer Fittings			
Male Luer Coupler	20	25064-U	
Male Luer Plug (use to seal Inlet Sampling Cap)	12	504351	
Female Luer Plug (use to seal Outlet Sampling Cap)	12	57098	

Order: 1.800.325.3010 Technical Service: 1.800.359.3041 Web: www.sigma-aldrich.com/supelco

Sample
Preparation

SUPELCO

Air Monitoring ATIS Adsorbent Tube Injector System



P000849

ATIS™ Adsorbent Tube Injector System

The Supelco ATIS is a sample preparation device for adsorbent tubes. The Adsorbent Tube Injector System employs the technique of flash vaporization to vaporize the sample into a continuous flow of an inert gas, which carries the sample to the adsorbent tube. The sample pathway of the Adsorbent Tube Injector System is constructed of glass and stainless steel. The calibration standard is injected by a syringe through a replaceable septum in the center of the injection glassware, which is heated.

- Injecting calibration standards onto adsorbent tubes, to calibrate your analytical system
- Injecting surrogates and system monitoring compounds onto adsorbent tubes before or after sampling
- Removes moisture from tubes prior to analysis (Dry purging)
- Connect an air-sampling bag to the outlet of the ATIS to vaporize a calibration standards prior to assure complete vaporization.

The ATIS will accept either 1/4" or 6mm OD Thermal Desorption tubes. Included is a Luer/Hose Barb adapters to connect a variety of solvent desorption tubes.

The temperature range of the ATIS is ambient to 120°C. The flow range is 0 to 100mL/min.

The ATIS includes the injection glassware, a constant flow controller with a on/off valve, the heating source, spare parts along with all the necessary fittings and tubing. You simply plumb it to a regulated source of nitrogen or helium and plug it to the appropriate electrical source.

DESCRIPTION	CAT. NO	PRICE
110VAC Model	28520-U	
220VAC Model	28521-U	
Replacement Injection Glassware	28526-U	



P000850

Thermal Extraction Glassware

Use the ATIS to thermally extract samples onto an adsorbent tube. The opening in the glassware will accept solid samples up to 1/2" (13mm) in diameter and up to 3" long (76mm) to be inserted into the glassware. The extraction glassware simply slides into the ATIS heating block. Two types of glass joints are available.

DESCRIPTION	CAT. NO	PRICE
20/20 Micro Connector	28523-U	
19/22 Ground Joint	28524-U	



P000###

Purge and Trap/Humidifier Module for the ATIS

A separate module is available that will allow you to purge aqueous samples onto an adsorbent tube at ambient temperatures. This module can also be used to generate a dynamic humidified stream of the carrier gas for spiking calibration standards. The purge and trap module includes purge and trap glassware, and a separate flow controller that allows the user to set a separate purge (wet) flow rate independently of the dry flow rate. The purge and trap module accepts standard 22mL threaded vials to simplify your sample prep.

DESCRIPTION	CAT. NO	PRICE
Purge and Trap Humidifier Module	28522-U	
Replacement Purge & Trap Glassware	28527-U	

Order: 1.800.325.3010 Technical Service: 1.800.359.3041 Web: www.sigma-aldrich.com/supelco