

Air Sampling

Canisters & Accessories

- Canisters
- Canister Valves & Gauges
- Passive Air Sampling Kits
- Flow Calibrators
- Canister Accessories
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- Miniature Air Sampling Canisters
- Gas Sampling Bags
- Thermal Desorption Unit Tubes
- PUFs, Resins, Glass Impingers
- Gas Calibration Standards
- Regulators



Air Canisters for VOC Sampling

SilcoCan® & TO-Can® Air Sampling Canisters

- Get high-performance canisters from the innovators of silicon coating technology.
- Variety of options available, including SUMMA can equivalent.
- Standard fittings compatible with all instrumentation and accessories.
- Exclusive manufacturer of 1 L spherical canister.
- Repair service available to extend canister life.



Canister Options

Sizes	1, 3, 6, 15 L
Valves	RAVE™ diaphragm, Parker® diaphragm, Swagelok® bellows
Interior Coating	Electropolished, Siltek®-treated
Gauges	3 vacuum/pressure ranges

Applications

Ambient Air	U.S. EPA TO-14A, TO-15, IP-1A, ASTM D5466, OSHA PV 2120, NJ DEP Low Level TO-15
Indoor Air	IP-1A, NJ DEP Low Level TO-15
Vapor Intrusion	
Emergency Response	

Dimensions/Weights of Air Canisters

Can Volume	Dimensions (height x sphere diameter)		Weight	
	1 liter	8.5 x 5.25"	21.6 x 13.3 cm	2.25 lb
3 liter	11.5 x 7.25"	29.2 x 18.4 cm	3.5 lb	1.59 kg
6 liter	12.5 x 9.25"	31.8 x 23.5 cm	5.75 lb	2.61 kg
15 liter	17 x 12.25"	43.2 x 31.1 cm	11.75 lb	5.33 kg



See pages 421–422 for canister product listings or go to www.restek.com/air for more air sampling products and solutions.

Anatomy of a SilcoCan® Canister

Optional gauge



- Quickly confirm vacuum or pressure inside canister.
- Monitor pressure changes.
- Fully protected by canister frame.
- Can be heated to 110 °C during cleaning.

Newest surface technology

To ensure sample stability, SilcoCan® canisters are deactivated with innovative Siltek® surface treatment, which chemically bonds a silicon layer to the metal inner surface of the canister. This layer offers unsurpassed inertness for active compounds, including polar and sulfur-containing molecules. It will not crack, chip, or flake off, despite harsh handling in the field or during transport.



Enhanced valve and canister bracket

Canister holder and valve bracket protect canister, tube stub, and valve.

1/4" tube stub

Allows user to interchange valves.

Serial-controlled label

For quick, sure identification.

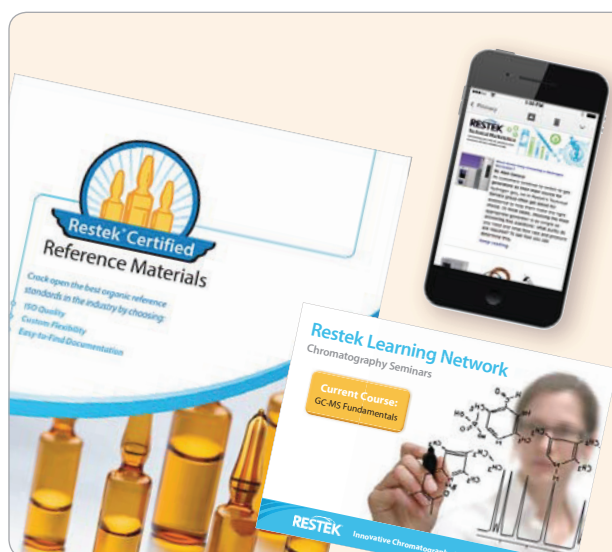
Rugged stainless steel

Canisters and valves are made of 304 and 316 stainless steel to withstand the rigors of field work.



Custom Coatings Available from Restek

- **Siltek®**—The ultimate passivation of treated surfaces, from glass to high-nickel alloys of steel; ideal for sulfurs, automotive exhaust testing, or stack gas sampling.
- **Sulfinert®**—A required treatment for metal components when analyzing for parts-per-billion levels of organo-sulfur compounds.
- **Silcosteel®-CR**—A corrosion-resistant layer that increases the lifetime of system components in acidic environments containing hydrochloric acid, nitric acid, or seawater.



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Introduce Your Sampling Canisters to Restek® Air Valve Excellence (RAVE™)



Available options:

- Rugged stainless steel construction with or without Siltek® treatment for added inertness.
- Choose 2 or 3 ports to accommodate optional gauge.
- Diaphragm rebuild kits available to extend the life of your valves.



RAVE™ valves feature proven long life, leak-free performance, and effortless operation. Now standard on our full line of SilcoCan®, TO-Can®, and miniature air sampling canisters, these newly redesigned valves are also great for upgrading existing canisters.

RAVE™ Diaphragm Air Valves

- **Proven long life**—durable design is engineered to exceed 15,000 cycles.
- **Leak-free performance**—every valve is helium leak-tested to 1×10^{-6} mL/sec.
- **Effortless operation**—easily finger-turn to achieve full valve closure (only 10 in-lb).
- **Enhanced damage-resistance**—W-type valve seats are work-hardened and wetted surfaces contain no moving parts.

Turn to your trusted partner for air sampling and chromatography. Order Restek® Air Valve Excellence for your air sampling canisters today.

▶ See pages 421–423.

www.restek.com/air

SilcoCan® Air Sampling Canisters with RAVE™ Valve

Ideal for low-level reactive sulfur (5–20 ppb), TO-14A, or TO-15 compounds

- Siltek®-treated canister with optional Siltek®-treated valve offers unsurpassed inertness, even for sulfur-containing or brominated compounds.
- High-quality, metal-to-metal seal, 2/3-turn valve with stainless steel diaphragms prevent sample adsorption for more-accurate results.
- Canisters and valves made of 304 and 316 stainless steel to withstand the rigors of field work.
- Both 2-port and 3-port valves available; 3-port valve includes -30" Hg/60 psi vacuum/pressure gauge (other gauges available).
- Now featuring the proven long life, leak-free performance, and effortless operation of the new RAVE™ valve. (See page 420 for more information.)

For ultimate inertness, SilcoCan® air sampling canisters feature our unique Siltek® treatment technology. Even highly active components, at low parts-per-billion concentrations, can be readily sampled and stored without loss. The RAVE™ valve is a high-quality, metal-to-metal seal, 2/3-turn valve with metal diaphragms to prevent sample adsorption for more-accurate results. Both stainless steel and Siltek®-treated RAVE™ valves are available, in both the 2-port and 3-port configurations. Each canister is slightly pressurized with contaminant-free nitrogen prior to shipment.

Whether you are sampling for TO-14A, TO-15, or reactive sulfur compounds, SilcoCan® canisters are your best choice for inertness. In Tedlar® bags, the stability of low-level (100 ppbv) sulfur volatile organic compounds (VOCs) is poor, even within 24 hours of sampling. Sulfur compounds react with the metal surface in electropolished canisters, so they are unsuitable for collecting and storing low-level sulfur VOCs. SilcoCan® air sampling canisters, which feature a Siltek®-treated surface, offer excellent storage stability for sulfur VOCs at very low levels (5–20 ppbv), under dry or humid conditions. The versatility of the SilcoCan® canister makes it an excellent choice for collecting and storing TO-14A or TO-15 compounds.



Canisters are the gold standard for ambient VOC sampling.

Volume discounts?

Call Restek® Customer Service or your local Restek® representative!

Get the ultimate insurance plan—order your SilcoCan® canister with a Siltek®-treated valve.

Description	1 L Volume cat.#	3 L Volume cat.#	6 L Volume cat.#	15 L Volume cat.#
2-Port RAVE Valve	27400	27404	27408	27412
2-Port Siltek-Treated RAVE Valve	27401	27405	27409	27413
3-Port RAVE Valve with Gauge*	27402	27406	27410	27414
3-Port Siltek-Treated RAVE Valve with Gauge*	27403	27407	27411	27415
without Valve	22090	22091	22092	22093

*Range of standard gauge is -30" Hg to 60 psi.

Do not exceed canister maximum pressure of 40 psig (2.75 bar).

Note: If attaching any of Restek's passive sampling kits to a 3 L canister, use a Siltek®-treated (cat.# 563646) or stainless steel (cat.# 563647) connector between the two components. Please contact Restek® Customer Service or your local Restek® representative to order.

Stable Storage of 66 VOCs for 30 Days With SilcoCan® Air Sampling Canisters

Download the free application note by searching for "EVAN2066-UNV" at

www.restek.com



TO-Can® Air Sampling Canisters with RAVE™ Valve

Optimized for Methods TO-14A, TO-15, IP-1A, ASTM D5466, OSHA PV 2120, and NJ DEP Low Level TO-15

- Proprietary electropolished surface maintains compound stability.
- High-quality, metal-to-metal seal, 2/3-turn valve with stainless steel diaphragms prevent sample adsorption for more-accurate results.
- Both 2-port and 3-port valves available; 3-port valve includes -30" Hg/60 psi vacuum/pressure gauge (other gauges available).
- SUMMA canister equivalent.
- Now featuring the proven long life, leak-free performance, and effortless operation of the new RAVE™ valve. (See page 420 for more information.)

U.S. EPA Methods TO-14A and TO-15 regulate the collection, storage, and analysis of volatile organic compounds (VOCs) using treated air sampling canisters. Restek offers a complete line of TO-Can® canisters (SUMMA can equivalent), electropolished using a proprietary process and extensively cleaned using an ultrasonic method. This ensures a high-quality, passivated surface that maintains the stability of TO-14A/TO-15 compounds during storage. A frame surrounds the electropolished canister, eliminating the need for weld marks on the sphere, thereby preventing active sites on the canister. The RAVE™ valve supports the excellent performance of the canister.

A unique holder attaches the handle and base to the canister without welds and protects the canister, tube stub, and valve. The 2/3-turn diaphragm valve has a metal-to-metal seat and a temperature limit of 250 °C. Each canister is slightly pressurized with contaminant-free nitrogen prior to shipment.

Quickly confirm vacuum or pressure by ordering your SilcoCan® or TO-Can® canisters with high-quality premounted gauges.



Description	1 L Volume cat.#	3 L Volume cat.#	6 L Volume cat.#	15 L Volume cat.#
2-Port RAVE Valve	27416	27418	27420	27422
3-Port RAVE Valve with Gauge*	27417	27419	27421	27423
without Valve	22094	22095	22096	22097

*Range of standard gauge is -30" Hg to 60 psi.
Do not exceed canister maximum pressure of 40 psig (2.75 bar).

also available

Miniature Air Sampling Canisters

See **page 435**.

Alternative Mounted Vacuum/Pressure Gauges

The standard vacuum/pressure range on a SilcoCan® or TO-Can® canister fitted with a gauge is -30" Hg to 60 psi. To have a different gauge mounted on your canister, add the appropriate suffix number to the canister catalog number.*

Gauge	Suffix
-30" Hg/15 psi	-651
-30" Hg/30 psi	-652

*No price difference for these substituted gauges.

free literature

A Guide to Whole Air Canister Sampling: Equipment Needed and Practical Techniques for Collecting Air Samples

In this guide, we focus on collecting whole air samples in canisters, a flexible technique with many applications.

Download your free copy from www.restek.com by searching for "EVTG1073A"