

INNOVATIVE PRODUCTS

SilcoCan™ Canisters

The Complete Solution for Ambient Air Monitoring



Turning Visions into Reality™

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SilcoCan™ Canisters: Product Enhancements

Improved Design

Ideal for low-level reactive sulfur compounds (1ppb-20ppb)

Feature	Benefit
Siltek® treated.	High inertness—ensures sample stability.
High-purity, 2/3-turn valve with stainless steel diaphragms.	No sample adsorption at the valve, for more accurate results; easy to use.
Vacuum/pressure gauge (optional).	Ascertain internal conditions at a glance.
Variety of sizes.	Meet extensive range of sampling needs.
Can be heated to 250°C.	Superior cleaning, more accurate results.
Siltek® valve available (add suffix "-650" to cat. #).	Completely passive sample pathway ensures sample stability.

Optional gauge

- Quickly confirm vacuum or pressure inside canister.
- Monitor pressure changes.
- Fully protected by canister frame.
- Can be heated to 90°C during cleaning.

Newest surface technology

For high inertness, and to ensure sample stability, SilcoCan™ canisters are now deactivated with Restek's latest innovative surface treatment, Siltek®, which chemically bonds a fused silica layer to the metal inner surface of the canister. This layer offers unsurpassed inertness for active compounds, including polar and sulfur-containing molecules, and 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.

Dimensions/Weights of SilcoCan™ Air Canisters

Can Volume	Dimensions (height x sphere diameter)		Weight	
1 liter	8.5 x 5.25"	21.6 x 13.3cm	2.5 lbs	1.13kg
1.8 liter	10.25 x 6.25"	26.0 x 15.9cm	3.5 lbs	1.59kg
3 liter	11.5 x 7.25"	29.2 x 18.4cm	4 lbs	1.81kg
6 liter	12.5 x 9.25"	31.8 x 23.5cm	7 lbs	3.18kg
15 liter	17 x 12.25"	43.2 x 31.1cm	13 lbs*	5.90kg

*16 lbs shipped UPS Air, 22 lbs shipped Fed Ex (USA).

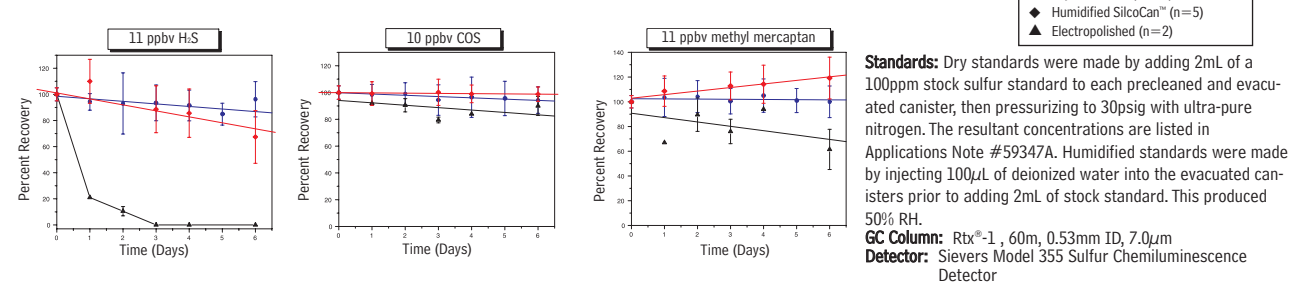


Restek canisters are shipped in reusable boxes with handles for easy carrying, eliminating costly carrying cases.

SilcoCan™ Canisters: The Complete Monitoring Solution

Whether you are monitoring for TO-14, TO-15, or reactive sulfur compounds, Restek's SilcoCan™ canister is your best choice for stability and inertness. In Tedlar® bags, the stability of low-level (100ppbv) sulfur VOCs is poor, even within 24 hours of sampling.¹ Sulfur compounds react with the metal surface in electropolished canisters, so these canisters are unsuitable for collecting and storing low-level sulfur VOCs.² SilcoCan™ air monitoring canisters, which feature a Siltek®-treated surface, offer excellent storage stability for sulfur VOCs at very low levels (1–20ppbv), under dry or humid conditions (Figure 1). The versatility of the SilcoCan™ canister makes it an excellent choice for collecting and storing TO-14 and TO-15 compounds (Figure 2).

Figure 1 SilcoCan™ canisters effectively store very low levels of organic sulfur compounds.

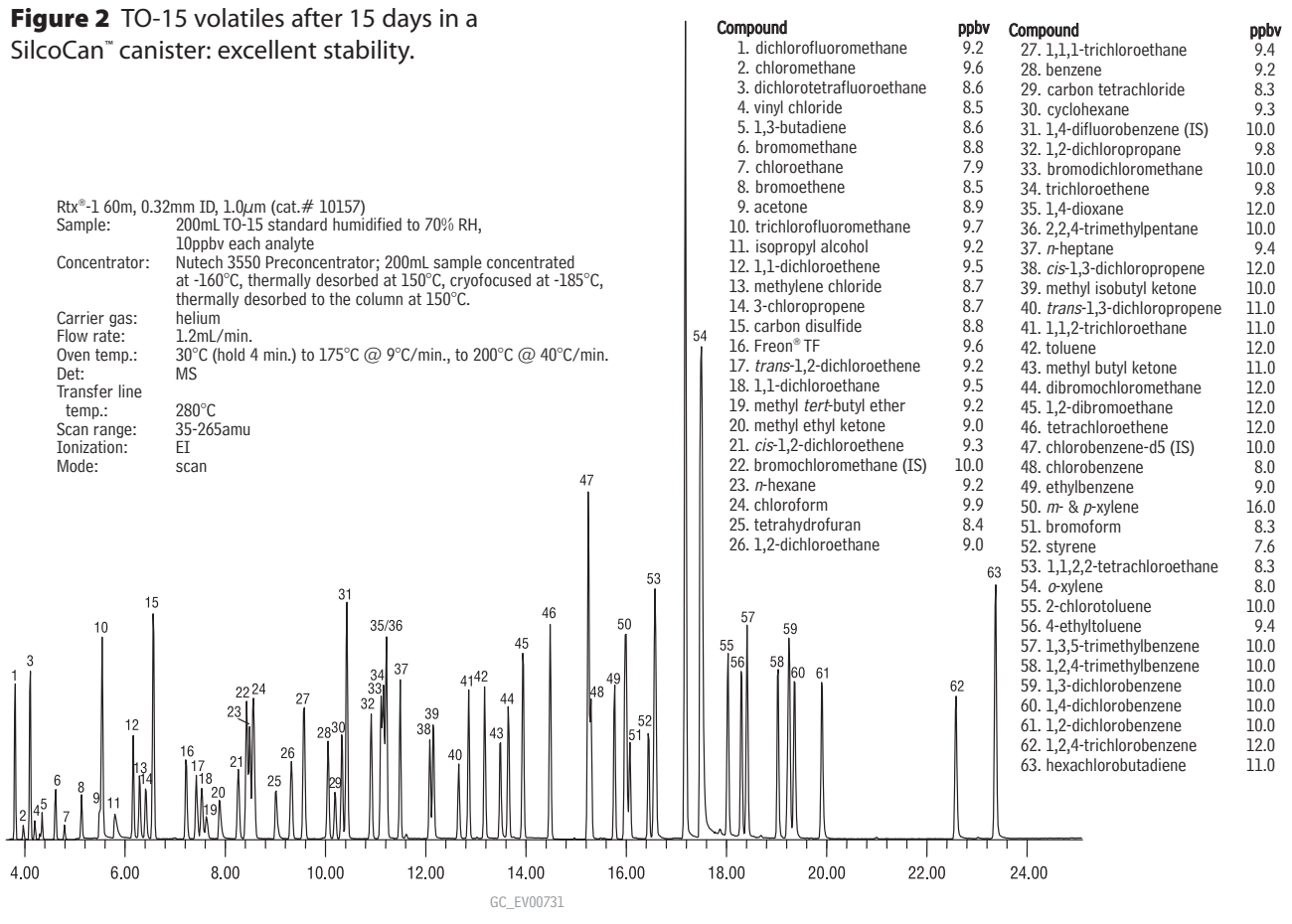


References

¹Quang Tran, You-Zhi Tang; *Stability of Reduced Sulfur Compounds in Whole Air Samplers*, 1994 AWMA/EPA International Symposium of Measurement of Toxic and Related Air Pollutants. (not available from Restek)

²Steven Hoyt, Vivian Longacre, and Michale Stroupe, *Measurement of Oxygenated Hydrocarbons and Reduced Sulfur Gases by Full Scan GC/MS: EPA TO-14 in Sampling and Analysis of Airborne Pollutants*, Eric Winegar, and Lawrence Keith, editors, CRC Press LLC, 384pp. (1993). (Restek cat.# 20468)

Figure 2 TO-15 volatiles after 15 days in a SilcoCan™ canister: excellent stability.



also available

Miniature Air Sampling Canisters

- Ideal for indoor air, personal, emergency response, or soil gas sampling.
- 400cc or 1000cc in stainless steel or with Sulfinert® treatment, for greatest inertness.
- 1000cc canister is suitable for US EPA Methods TO-14 and TO-15.

Passive Air Sampling Kits

- Improved design eliminates leaks at the filter.
- Siltek®-treated components, available to ensure a very inert surface.
- Available in six sampling flow ranges.

Request our catalog, or visit our website.

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Restek logo, Rbx, SilcoCan,
Siltek, Sulfinert, Turning
Visions into Reality

Other Trademarks:
Freon (E.I. duPont Nemours &
Co, Inc.)

SilcoCan™ air monitoring canisters feature:

- High quality, metal-to-metal seal, 2/3-turn valve with metal diaphragms.
- Sizes to support a wide range of sampling needs.
- Optional 3-port valve and optional 30" Hg/60psig vacuum/pressure gauge (other ranges available).

SilcoCan™ canisters also feature:

- Unsurpassed inertness, even for sulfur-containing or brominated compounds.
- For critical applications, order a Siltek® treated valve - add suffix "-650" to the catalog number of the canister.



SilcoCan™ Canisters

Siltek® treated - ideal for low-level reactive sulfur compounds (1-20ppb)

Description	qty.	cat.#
1L Volume		
SilcoCan™, 1/4" Valve	ea.	24180
SilcoCan™, 1/4" Siltek® Valve	ea.	24180-650
SilcoCan™ w/ Gauge, 1/4" Valve	ea.	24140
SilcoCan™ w/ Gauge, 1/4" Siltek® Valve	ea.	24140-650
3L Volume		
SilcoCan™, 1/4" Valve	ea.	24181
SilcoCan™, 1/4" Siltek® Valve	ea.	24181-650
SilcoCan™ w/ Gauge, 1/4" Valve	ea.	24141
SilcoCan™ w/ Gauge, 1/4" Siltek® Valve	ea.	24141-650
6L Volume		
SilcoCan™, 1/4" Valve	ea.	24182
SilcoCan™, 1/4" Siltek® Valve	ea.	24182-650
SilcoCan™ w/ Gauge, 1/4" Valve	ea.	24142
SilcoCan™ w/ Gauge, 1/4" Siltek® Valve	ea.	24142-650
15L Volume		
SilcoCan™, 1/4" Valve	ea.	24183
SilcoCan™, 1/4" Siltek® Valve	ea.	24183-650
SilcoCan™ w/ Gauge, 1/4" Valve	ea.	24143
SilcoCan™ w/ Gauge, 1/4" Siltek® Valve	ea.	24143-650
Replacement 1/4" Valves for Air Monitoring Canisters		
1/4" Replacement Valve (2-port)	ea.	24145
1/4" Replacement Valve (3-port)	ea.	24147
1/4" Siltek® Replacement Valve (2-port)	ea.	24144
1/4" Siltek® Replacement Valve (3-port)	ea.	24146

Air Canister Heating Jacket

- Closely simulates oven environment—heats entire canister, including the valve.
- Two temperature settings, 75°C and 150°C.*
- Prevents sample condensation, for accurate sub-sampling.
- Easily fits canister up to 6 liters.
- Lightweight; comfortable to the touch when heated.
- Connect up to five Canister Heating Jackets to one 15 amp circuit.

Description	qty.	cat.#
Air Canister Heating Jacket (110 volt)	ea.	24123

*Not CE certified.

ordering note

All Restek canisters are originally equipped with these high-quality Parker Hannifin diaphragm valves. Each valve is helium leak-tested to 4 x 10⁻⁶cc/sec. The all-stainless steel construction eliminates contamination and the valve functions at temperatures from -100°C to 250°C. Compression outlet fitting, indicator plate to display open or closed position, 1/4" inlet and outlet.



Lit. Cat.# 59011A

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