

Sulfinert® Treatment*

The most inert passivation surface available, Sulfinert® treatment is ideal for complying with the most stringent sulfur and mercury regulations and achieving the lowest detection limits. The Sulfinert® layer prevents compounds from contacting the reactive stainless steel surface. Sulfinert® parts can be used over a wide pH range. Combine our custom service for parts such as manifolds and valves with our stock Sulfinert® parts to ensure your entire system is inert.

industries served

Petrochemical (exploration and refining)
Chemical
Mercury monitoring

Features

Inert.

Durable and flexible layer, incorporated into the surface.

Stable in acidic or weakly basic (pH 8-9) environments.

Proven thermal stability to 450°C in an inert atmosphere.

Nonpolymeric.

Treated tubing and fittings in stock for immediate delivery.

Benefits

Sample, transfer, and analyze sulfur compounds and other active compounds at parts-per-billion levels.

Items can be worked after treatment—no flaking, chipping, or cracking.

Sample sulfur compounds without compromising compound stability.

Effectively bake-out contaminants.

No memory effects, as seen with Teflon®-coated parts.

Parts are available when you need them.

Sulfur Compound Sampling, Storage, and Transfer Considerations**More accurate results and faster cycle times, using Sulfinert® treated components**

Accurate analyses for parts-per-million to parts-per-billion levels of sulfur-containing compounds in petrochemical streams are critical to meeting new regulations for lower levels of sulfur in diesel fuel and gasoline. Many organo-sulfur compounds—hydrogen sulfide, methyl mercaptan, and ethyl mercaptan among them—react with or adsorb strongly to metal surfaces. Adsorption of sulfur compounds in sampling, storage, and/or transfer apparatus can cause prolonged analysis cycle times as well as inaccurate, falsely low values. Sulfinert® treatment adds value to your process by ensuring accurate analytical results, improved yields, and faster cycle times. Save thousands by improving the surface performance of your analytical and process systems.

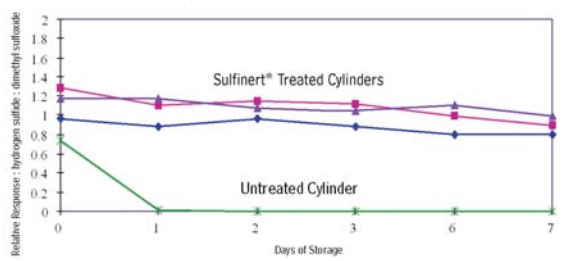
Sulfinert® offers exceptional performance in sample storage systems.

Figure 1 compares a gas containing 17ppbv of hydrogen sulfide stored for 7 days in untreated and Sulfinert® treated stainless steel sample cylinders. The data show the Sulfinert® treated system will reliably

store ppb levels of the active sulfur-containing compound during transport from the sampling site to the analytical laboratory. In contrast, hydrogen sulfide degraded rapidly in the untreated cylinder, and was lost totally within 24 hours.

Visit www.restekcoatings.com to download technical studies and learn more about how Sulfinert® can improve the performance of your analytical system.

Figure 1 Sulfur compounds are stable in Sulfinert® treated stainless steel systems (17ppbv hydrogen sulfide in 500mL cylinders).

**it's a fact**

A Sulfinert® treated system will store and transfer ppb levels of active sulfur-containing compounds without adsorption.

*See Frequently Asked Questions on page 391.

product guide



A wide variety of stock Sulfinert® treated **tubing and fittings** are available—see pages 392–396.

Custom treatment is available for **your existing equipment**—see page 398.