

# SAMPLING SOLUTIONS

## For Fugitive Emissions / Fence-line Testing

### Recognition

Fugitive emissions are emissions of gases and vapors due to leaks from components in pressurized equipment including pipe connections, valves, and mechanical seals. Fugitive emissions also occur at waste management facilities, storage tanks, and agricultural sites. Fugitive emissions contribute to air pollution and climate change and can affect public health, particularly that of residents in nearby communities. In 2015, U.S. EPA published Method 325 to address fugitive emission of benzene from petroleum refineries. It includes two sub-parts: EPA 325A, Sampler Deployment and VOC Sample Collection, describes procedures for deploying the sorbent tubes and passively collecting VOCs and EPA 325B, Volatile Organic Compounds from Fugitive and Area Sources, which describes thermal desorption/gas chromatography (TD/CD) analysis of volatile organic compounds (VOCs) from fugitive emission sources collected onto sorbent tubes using passive sampling.

SKC offers both active and passive sampling solutions for EPA 325 (Parts A and B) for fence-line monitoring which targets compounds throughout an environmental perimeter.

***See the SKC equipment recommended for fugitive emissions/fence line testing.***

### Evaluation with SKC Sampling Solutions

For over 50 years, SKC has led the research, design, and manufacture of quality sampling equipment and media to aid health and safety professionals in the evaluation of occupational and environmental hazards.

Choose from SKC method-based sampling solutions for fugitive emissions/fence-line testing, including sample pumps, sample tubes, sample bags, passive samplers, and innovative portable instruments.

***See reverse side for specific method and sampling equipment/media information.***

## Sample Collection

### Active Air Sampling Solutions

SKC manufactures and stocks Tedlar, FlexFoil<sup>®</sup>, and custom sample bags with a choice of stainless steel, polypropylene, or PTFE fittings. See the *SKC Sample Bag Stability Report* to choose the bag best suited to your target compound.

Target Compound	Select Methods*	SKC Sample Collection Media and Cat. No.	SKC Sample Pump and Cat. No.	Notes
Carbon dioxide <sup>†</sup>	<a href="#">NIOSH 6603</a> <a href="#">OSHA ID 172</a>	Tedlar <sup>®</sup> sample bag <a href="#">231-05</a> or <a href="#">232-05</a>	<a href="#">Pocket Pump TOUCH</a> 220-1000TC or <a href="#">Grab Air</a> 222-2301	Requires PTFE tubing
Methane	---	<a href="#">Tedlar</a> or <a href="#">FlexFoil</a> sample bag	<a href="#">Grab Air</a> 222-2301 or <a href="#">Pocket Pump TOUCH</a> 220-1000TC	Requires PTFE tubing
Nitrogen dioxide/Nitric oxide	NON 59	Sorbent tube <a href="#">226-40A</a>	<a href="#">Pocket Pump TOUCH</a> 220-1000TC	
Sulfur dioxide	<a href="#">OSHA 1011</a> <a href="#">NIOSH 6004</a>	Sorbent tube <a href="#">226-177</a>  Coated filter cassette <a href="#">225-9005</a>	<a href="#">Pocket Pump TOUCH</a> 220-1000TC  <a href="#">AirChek<sup>®</sup> TOUCH</a> 220-5000TC	
	---	Tedlar sample bag <a href="#">231-10</a>	<a href="#">Grab Air</a> 222-2301	Requires PTFE tubing
Sulfur hexafluoride <sup>†</sup>	<a href="#">NIOSH 6602</a>	Tedlar sample bag <a href="#">231-03</a> or <a href="#">232-03</a>	<a href="#">Pocket Pump TOUCH</a> 220-1000TC or <a href="#">Grab Air</a> 222-2301	Requires PTFE tubing
VOCs	<a href="#">EPA TO-17</a>	Sorbent tube <a href="#">226-300 Series</a>	<a href="#">Pocket Pump TOUCH</a> 220-1000TC	
Hydrocarbons and Aromatic Hydrocarbons	<a href="#">NIOSH 1500</a> <a href="#">NIOSH 1501</a>	Sorbent tube <a href="#">226-01</a>	<a href="#">Pocket Pump TOUCH</a> 220-1000TC	

<sup>†</sup> For these target compounds, SKC also recommends using Tedlar 232 Series, FlexFoil 262 Series, or FlexFoil PLUS 252 Series sample bags with the Vac-U-Chamber 231 Series and AirChek XR5000 sample pump.

## Passive Air Sampling Solutions

Target Compound	Select Methods*	SKC Sample Collection Media and Cat. No.	Notes
Benzene	<a href="#">EPA 325A</a> and <a href="#">EPA 325B</a>	Passive TD Tube <a href="#">226-520</a> (includes diffusion cap); Sampling Shelter <a href="#">226-526</a> available	
Nitrogen dioxide and/or sulfur dioxide	Research Reports <a href="#">1781</a> and <a href="#">1789</a>	<a href="#">UMEX 200 Passive Sampler for NO<sub>2</sub>/SO<sub>2</sub></a>	
VOCs	<a href="#">EPA TO-17/</a> Research Report <a href="#">1812</a>	<a href="#">ULTRA® 690 Series, choice of four sorbents</a>	

## Monitoring Solutions

Target Compound	Instrument and SKC Cat. No.	Notes
VOCs	<a href="#">HAZ-SCANNER EPAS</a>	Custom configured

\* Other methods may apply. SKC recommends those listed.

Publication 1849 Rev 2022.11

Notice: This publication is intended for general information only and should not be used as a substitute for reviewing applicable government regulations, equipment operating instructions, or legal standards. The information contained in this document should not be construed as legal advice or opinion nor as a final authority on legal or regulatory procedures.

SKC Ltd [www.skcltd.com](http://www.skcltd.com)  
+44 1258 480188 [enquiries@skcltd.com](mailto:enquiries@skcltd.com)