



## Operating Instructions

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# SKC Ethylene Oxide Passive Sampler Cat. No. 575-005



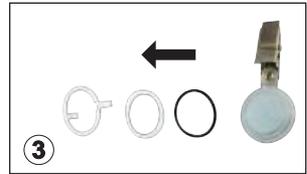
The SKC Ethylene Oxide Passive Sampler is a small ready-to-use badge that provides superior collection of ethylene oxide (EtO) without the use of a sample pump. SKC has scientifically validated the sampling rate for EtO and other critical parameters of the SKC Ethylene Oxide Passive Sampler to meet OSHA/ANSI/ISEA requirements. The SKC Ethylene Oxide Passive Sampler contains the same sorbent that is specified in active OSHA Method 1010.

### Performance Profile

- Sorbent/Amount:** Anasorb<sup>®</sup> 747 coated with hydrobromic acid, 500 mg
- Housing Material:** Nylon
- Diameter:** 1.4 in (3.5 cm)
- Length:**  
(including clip) 2.5 in (6.3 cm)
- Depth:** 0.6 in (1.5 cm)
- Concentration Range:** 0.1 to 4 ppm
- Analysis:** Solvent desorption, Gas Chromatography/Electron Capture Detector (GC/ECD)
- Shelf-life:** 18 months at < 39.2 F (4 C)
- Storage:** Before use: Store at < 39.2 F (4 C).  
After use: Store at < 39.2 F (4 C) for up to 3 weeks.
- !** *Do not store with food.*
- Sample Time:** Validated for 15-min and 8-hr occupational exposure sampling
- Sampling Rate:** 21.2 ml/min

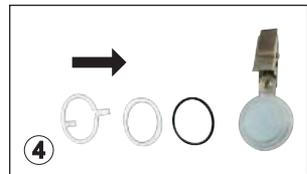
## Sampling

1. Remove sampler from sealed pouch. Retain and set aside all other parts, including the desorption efficiency tube(s).
2. Write the start time, date, and a user-assigned sampler ID number on the label on the back of the sampler.
3. Remove the lock, cap, and O-ring from the sampler and set aside. Clip sampler to worker's clothing in the breathing zone. Ensure small holes are facing out.



*Note: Sample the entire workshift to obtain a true 8-hour exposure. If breaks/lunch are part of the 8-hour workday or occur in the work area, samplers may remain sampling. If desired, the sampler can be removed for breaks/lunch and sealed with the provided cap. When the worker returns to the work area, replace the sampler on the worker's clothing and remove the cap. Note the times the sampler is removed from and placed back on the worker to ensure accurate air volumes.*

4. At the end of the desired sampling period, unclip the sampler from worker clothing. Push the O-ring, cap, and lock (removed during Step 3) onto the side of the sampler containing the holes.
5. Write the stop time on the label on the back of the sampler.



6. Carefully package the sampler and all other parts and send to an AIHA-accredited laboratory for analysis. If using an in-house laboratory, refer to the analysis instructions included in this package.



## Storage

**Before use:** Store at < 39.2 F (4 C).

**After use:** Store at < 39.2 F (4 C) for up to 3 weeks.

❗ *Do not store with food.*

## Analysis

Solvent desorption, Gas Chromatography/Electron Capture Detector (GC/ECD)  
*See Analysis Instructions at [www.skcinc.com/instructions/37009.pdf](http://www.skcinc.com/instructions/37009.pdf).*

## Validation

The SKC Ethylene Oxide Passive Sampler has Full validation. Full validation means that it has passed all NIOSH Partial validation protocol and factorial study, including interfering compounds. This is the most rigorous test and includes all parameters affecting sampling accuracy.

For compliance sampling, it is recommended that only those passive samplers with agency, Full, or Bi-level validation be used. Passive samplers with lower validation levels should be used only if verified by sorbent tube methods.

## References

Yost, C., *Validation of Ethylene Oxide Using the SKC 575-005 Diffusive Sampler*, SKC Publication 1543, June 2000, available at [www.skcinc.com](http://www.skcinc.com)

## Ordering Information

Description	Cat. No.	Qty.
<b>Ethylene Oxide Passive Sampler</b> , contains 500 mg	<b>575-005</b>	<b>5</b>
Anasorb 747 coated with hydrobromic acid	<b>575-005A</b>	<b>25</b>
	<b>575-005C</b>	<b>500</b>
<b>Desorption Efficiency Tubes for 575-005 Samplers</b>	<b>575-051</b>	<b>10</b>

**[www.skcinc.com](http://www.skcinc.com)**

*Notice: This operating instruction may not address all safety concerns (if any) associated with this product and its use. The user is responsible for determining and following the appropriate safety and health practices and regulatory limitations (if any) before using the product. The information contained in this document should not be construed as legal advice, opinion, or as a final authority on legal or regulatory procedures.*

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