

RAE Systems, Inc. 1339 Moffett Park Dr.

Telephone 408-752-0723 Tube Orders 1-888-723-8823 Sunnyvale, CA 94089 USA Web www.raesystems.com

Tube Data Sheet VOC Zeroing Tube

No. 025-2000-010

This tube is used to purify ambient air to form a zero standard for calibrating VOC detectors in ambient background. Calibration should be performed at the same temperature, humidity and flow as the measurement. To connect to a ppbRAE or MiniRAE 2000, use Inlet Tube Adapter p/n 025-3002-000 according to the instructions on the reverse side. See Technical Notes 150, 172 and 178 for more details on use and how to connect other monitors.

Storage Life: 3 years

Temperature Range: -10 to +50°C

Filtering efficiency for VOCs:

| Compounds | Concentration (ppbv) | Apparent Reading (ppbv)^ |
|----------------|----------------------|-----------------------------|
| Methane | 10000 | 10000* |
| Ethylene | 100000 | 100000* |
| Propane | 100000 | 0 |
| Butane | 10000 | 0 |
| Isobutylene | 100000 | 0 |
| Butadiene | 10000 | 0 |
| n-Hexane | 10000 | 0 |
| Gasoline | 10000 | 0 |
| Toluene | 10000 | 0 |
| Ethanol | 100000 | 0 |
| Acetone | 100000 | 0 |
| Ethylene oxide | 10000 | 0 |
| Benzene | 10000 | 0 |

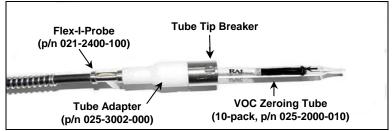
[^] Measured with ppbRAE after 2-min. exposure.

Cautions:

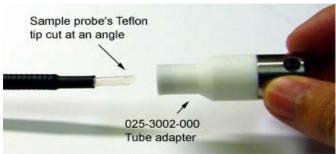
- Single use only.
- Attach tube shortly before zeroing to avoid loss of adsorption capacity.
- Will not absorb CO; partially absorbs H₂S. May not absorb some other inorganic compounds.

^{*}This tube can not remove methane, ethane or ethylene. (Methane measured with and LEL sensor.)

Connections



Connection to MiniRAE 2000 or ppbRAE



Connection to MiniRAE Plus or UltraRAE



Connection to Multi-gas monitors

Zeroing Procedure

- 1) Insert the tip of the Flex-I-Probe or other probe into the smaller end of the Tube Adapter
- 2) Break the two ends of a VOC zeroing tube using the smaller hole on the side of the Tube Adapter
- 3) Insert one end (black arrow indicates the right direction) of the open VOC zeroing tube into the bigger end of the adapter;
- 4) Run the zeroing calibration procedure of the instrument
- 5) Discard the used VOC zeroing tube (single use only)

<u>Caution</u>: Dispose of spent or expired tubes according to local regulations. Possibly hazardous materials are given under the section Reaction Principle.