

Operating Instructions Glutaraldehyde Monitor (Part Number: 380017)

# **Introduction**

Glutaraldehyde is a colorless liquid with an irritating odor. It has an odor threshold in the ppb level. Glutaraldehyde may be fatal if inhaled, swallowed or absorbed through the skin. Symptoms of exposure may include burning sensations, headache, coughing, shortness of breath, nausea and vomiting. To the best of our knowledge, toxicological, chemical and physical properties have not been thoroughly studied. NIOSH STEL is 0.2 ppm.

Glutaraldehyde is used extensively in the medical field. It is used in hospitals for cold sterilization of medical supplies and instruments. Glutaraldehyde is also used as a disinfectant in urology, endoscopy and dental departments.

### **Principle of Operation**

The ChromAir passive monitor is a patented direct-read autogenic exposimeter. The device is constructed from five cells attached on one side to a flat indicator layer and on the other side to a series of different diffusive resistances. Glutaraldehyde vapor diffuses to the cells through the different diffusive resistances and reacts with the indicator layer, producing color change from pink to violet. The color produced on the indicator layer is a direct measure of the concentration in ppm. Visual color comparison is achieved by observing the formation of the violet threshold color on the individual cell and reading the corresponding concentration.

### **Physical Specifications:**

Dimensions	10.5 cm x 5.5 cm x 0.25 cm
Weight	11 g
Refrigerated shelf life	1 year
Store badges refrigerated at all times.	
Color change	pink to violet

### **Sampling Parameters:**

Concentration range Relative humidity range Face velocity range Temperature range Light effect - UV (direct sunlight) Light effect – visible Mean coefficient of variation Bias at ambient conditions Known Interferences: 0.04 - 0.95 ppm 25% - 85% 10 - 165 cm/sec 15°C - 35°C (59°F - 95°F) no effect no effect <u>+</u>6.8 1.4% No interferences are known

# **Operating Instructions**

- 1. Allow the badge to warm to room temperature prior to removing the badge from its protective pouch.
- 2. Enter all pertinent information on the I.D. label before monitoring is started (i.e. name, location, date and start time).
- 3. Remove the scavenger strip from the front of the badge.
- 4. For personnel monitoring, attach the badge near the user's breathing zone (i.e. collar) with the front side exposed to the surrounding atmosphere.
- 5. For area monitoring, attach the badge to a stand and mount in a centralized area with the front side exposed to the surrounding atmosphere.
- 6. Expose the badge 15 minutes.
- 7. At the end of the exposure period (15 minutes), return the badge to its original pouch and let stand for 45 minutes at room temperature to allow complete development of color. Read the badge no later than 3 hours after exposure.
- 8. At the end of the development period, locate the highest level cell with violet threshold color and read the corresponding average concentration from the scale.

#### WARRANTY EXCLUSIONS AND LIMITATION OF LIABILITY

IF THE USER DOES NOT ACCEPT THE FOLLOWING TERMS, THE USER SHOULD NOT USE THE CHROMAIR BADGES AND COLOR COMPARATORS.

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Warning: Keep out of reach of children, if ingested seek medical attention immediately.



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