

# GASTEC No.109A

## Instructions for Oil Mist (Mineral Oils) Airtec Tube

### FOR SAFE OPERATION :

Read this manual and the instruction manual carefully.

**⚠ CAUTION :** If not observed, injuries to the operator or damage to the product may result.

1. When breaking the tube ends, keep away from eyes.
2. Do not touch the broken glass tubes, pieces and reagent with bare hand(s).

**△ NOTES :** For maintaining performance and reliability of the test result.

1. Use this tube within the temperature range of 0 - 40°C (32 - 104 °F).
2. Shelf life and storage conditions of the tube are marked on the label of the box of tube.
3. If absolute humidity exceed 3 mg/l, the reagent will be stained yellow, but the yellow color does not affect the tube reading at all.

### APPLICATION OF THE TUBE :

Use of this tube for the detection of mainly mineral oils, simply connect the pressure reducer to your high pressure air source, compressor, cylinder, or air line and adjust the flow meter to the required setting.

### SPECIFICATION :

(As a result of Gastec's commitment to continued improvement, specifications are subject to change without notice.)



Measuring Range	0.3 - 1.5 mg / m <sup>3</sup>
Sampling Volume	60,000 ml
Sampling Rate	1,000 ml per minute
Sampling Time	60 minutes
Color Change	White / Greenish brown
Reaction Principle	Oil mist reduces iodine pentoxide to liberate iodine, which produces a greenish brown color Oil Mist + I <sub>2</sub> O <sub>5</sub> + H <sub>2</sub> S → I <sub>2</sub> + H <sub>2</sub> O

**\*\* Shelf Life :** Please refer to the Validity Date printed on the box of tube.

**\*\* Store the tubes in dark and cool place.**

### CORRECTION FOR TEMPERATURE, HUMIDITY AND PRESSURE :

**Temperature :** Temperature correction is not required.

**Humidity :** Humidity correction is not required.

**Pressure :** To correct for pressure, multiply the tube reading by

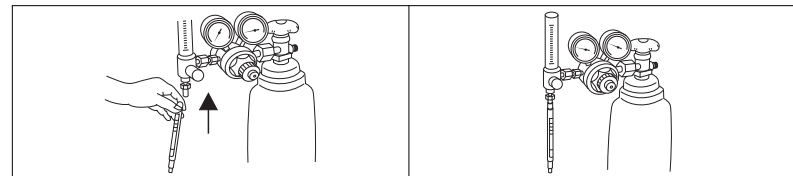
$$\frac{\text{Tube Reading (mg/m}^3\text{)} \times 1013 \text{ (hPa)}}{\text{Atmospheric Pressure (hPa)}}$$

### MEASUREMENT PROCEDURE :

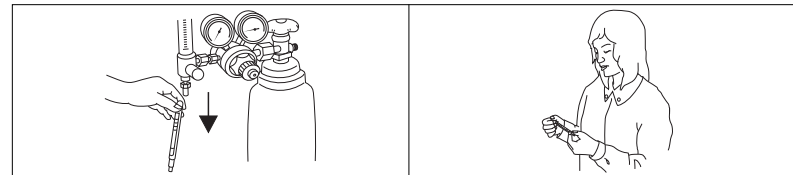
1. Install a reducer pressure with gauge and flow meter to a cylinder, compressor or air line and adjust the flow meter the required setting.
2. Break tips off a fresh detector tube in the tube tip breaker and insert a tube into a tube holder.



3. Attach the rubber tube holder to the flow meter outlet. Make certain the tube arrow **G** on the tube pointing in a down direction.
4. Turn on the cylinder or compressor and confirm the flow meter according to each Airtec tube specifications.
5. Time the flow rate with a stopwatch.



6. As soon as sampling time has elapsed turn off the cylinder or compressor, and remove the tube from the tube holder and then read the color change layer immediately.



### DISPOSAL INSTRUCTION :

Reagent of the tube does not use toxic substance. When disposing the tube regardless of whether used or unused, follow the rules and regulations of the local government.

### WARRANTY :

If you have any questions regarding gas detection and quality of the tubes, please feel free to contact your Gastec representatives.

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