

# INSTRUCTION MANUAL ACETALDEHYDE DETECTOR TUBE

No.133ZA

- ★ THIS DETECTOR TUBE IS USED ONLY WITH CARBON DIOXIDE ANALYZERS OFFERED BY ANALYTICAL SCIENCE AND TECHNOLOGIES, LLC.
- ★ READ CAREFULLY THIS INSTRUCTION MANUAL AND THE INSTRUCTION MANUAL OF THE CARBON DIOXIDE ANALYZER FROM ANALYTICAL SCIENCE AND TECHNOLOGIES, LLC.
- ★ DO NOT DISCARD THIS INSTRUCTION MANUAL UNTIL ALL THE TUBES IN THIS BOX ARE USED UP.

## 1. PERFORMANCE:

Measuring Range	: 0.05 - 1.0ppm
Sampling Volume	: 900mL
Sampling Time	: 150mL/min × 6 min
Colour Change	: Yellow → Pink
Detectable Limit	: 0.02ppm
Operating Temperature	: 65 - 80°F (18.3 - 26.7 °C) (No correction is necessary.)

### CAUTION

1. THE DETECTOR TUBE CONTAINS CHEMICAL REAGENTS.
2. DO NOT TOUCH THESE REAGENTS DIRECTLY ONCE TUBES WERE BROKEN.
3. KEEP THE TUBES OUT OF THE REACH OF CHILDREN.

### NOTICE

1. USE THE CARBON DIOXIDE ANALYZER AT THE 150mL/min IN FLOW RATE WHEN THE 133ZA ACETALDEHYDE DETECTOR TUBE IS CONNECTED.
2. DO NOT USE THIS TUBE OUTSIDE THE STATED OPERATING TEMPERATURE RANGE.
3. STORE TUBES IN A DARK AND REFRIGERATED PLACE (0-10 °C/32-50°F), AND USE BEFORE EXPIRATION DATE PRINTED ON THE TOP OF THE BOX.
4. PRIOR TO USE, READ CAREFULLY ITEM 5. USER RESPONSIBILITY.
5. READ THE CONCENTRATION IMMEDIATELY AFTER MEASUREMENT.

## 2. SAMPLING AND MEASUREMENT:

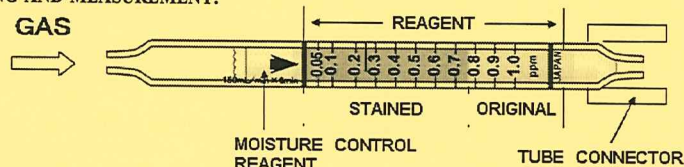


Fig.1

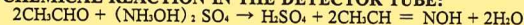
- ① Break both ends of the detector tube with attached ampule cutter.

**CAUTION** SAFETY GLASSES AND GLOVES SHOULD BE WORN TO PREVENT INJURY FROM SPLINTERING GLASS.

- ② Connect the detector tube into the tube connector of the Carbon Dioxide Analyzer as shown in Fig. 1 (Arrow mark shall point to the analyzer.), and fix it into the detector tube holder.
- ③ In accordance with instruction manual of Carbon Dioxide Analyzer, preset the TIMER at 6 minutes and adjust the flow rate at 150mL/min.
- ④ After completion of sampling (6 minutes), remove the detector tube from the tube holder and read the scale at the maximum point of a stained layer.

**SPECIAL NOTE:** I. When the maximum point of the stained layer is unclear, read the scale at the longest point of the stained layer. When the end of the stained layer is slanted, read the scale at the centre between the longest and shortest points.

## 3. CHEMICAL REACTION IN THE DETECTOR TUBE:



## 4. DISPOSAL OF TUBES

USED TUBES SHOULD BE DISCARDED CAREFULLY ACCORDING TO RELEVANT REGULATIONS, IF ANY.

## 5. USER RESPONSIBILITY:

It is the sole responsibility of the user of this equipment to ensure that the equipment is operated, maintained, and repaired in strict accordance with these instructions and the instructions provided with the Carbon Dioxide Analyzer, and that detector tubes are not used which are either beyond their expiration date or have a colour change different to that stated in the Performance specifications. The Manufacturer and Manufacturer's Distributor shall not be otherwise liable for any incorrect measurement or any damages, whether damages result from negligence or otherwise.

Printed in Japan

IME2550/1