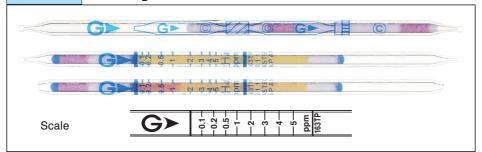
Detector tube

Ethylene Oxide C2H4O No.163TP



Performance

When used, these tubes are to be connected.

| Measuring range | 0.1 to 5 ppm | | |
|-------------------|-------------------|--|--|
| Sampling rate | 50 mL/min(500 mL) | | |
| Correction factor | 1 | | |
| Sampling time | 10 min | | |

 $\begin{array}{lll} \mbox{Detecting limit:} & 0.05 \mbox{ ppm} \mbox{ (500 mL)} \\ \mbox{Colour change:} & \mbox{Yellow} \rightarrow \mbox{Pale orange} \\ \end{array}$

Operating conditions : Temperature 0 to 40 °C (32 to 104 °F) correction used Relative humidity 10 to 90 % correction not used

Relative standard deviation : 10 % (for 0.1 to 1 ppm), 5 % (for 1 to 5 ppm)

Tube quantity and number of tests per box: 10 tubes for 5 tests

Shelf life: 12 months (in the refrigerator)

Reaction principle

C₂H₄O → 2HCHO

3HCHO + (NH₂OH)₃H₃PO₄ → H₃PO₄

H₃PO₄ + Base → Phosphate

Possible coexisting substances and their interferences

| Substance | Concentration | Interference | Changes colour by itself to |
|--------------|---------------|--------------|-----------------------------|
| Formaldehyde | 0.6 ppm | + | Pale orange |
| Acetaldehyde | 2.0 ppm | + | Pale orange |
| Ketones | 15 ppm | + | Pale orange |
| Alcohols | 300 ppm | _ | No |

Calibration gas generation

Permeation tube method