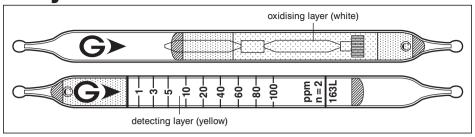
# Ethylene Oxide C2H4O

## No.163L



#### Performance

When used, these tubes are to be connected.

Measuring range	0.4 to 1 ppm	1 to 100 ppm	100 to 350 ppm
Number of pump strokes	4 (400 ml)	2(200 ml)	1(100 ml)
Correction factor	0.4	1	3.5
Sampling time	12 min	6 min	3 min

 $\begin{array}{lll} \mbox{Detecting limit:} & \mbox{0.1 ppm } (\mbox{4 pump strokes}) \\ \mbox{Colour change:} & \mbox{Yellow} \rightarrow \mbox{Reddish brown} \\ \end{array}$ 

Corrections for temperature & humidity: Temperature correction is necessary.

Relative standard deviation: 15 % (for 1 to 20 ppm), 10 % (for 20 to 100 ppm)

Shelf life: 1 year (in the refrigerator)

#### Reaction principle

C<sub>2</sub>H<sub>4</sub>O → 2HCHO

3HCHO + (NH<sub>2</sub>OH)<sub>3</sub>H<sub>3</sub>PO<sub>4</sub> → H<sub>3</sub>PO<sub>4</sub>

H<sub>3</sub>PO<sub>4</sub> + Base → Phosphate

### Possible coexisting substances and their interferences

Substance	Concentration	Interference	Changes colour by itself to
Aldehydes Ketones		++	} Reddish brown

#### Other substances measurable with this detector tube

Substance	Correction	No. of pump strokes	Measuring range
Epichlorohydrin	Factor : 1.2	2	1.2 to 120 ppm
Propylene oxide	Factor : 1.0	1	1 to 100 ppm

#### Calibration gas generation

Permeation tube method