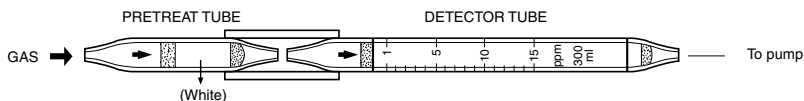


# ETHYLENE OXIDE



## 1. PERFORMANCE

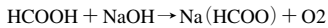
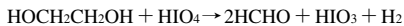
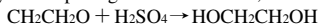
- 1) Measuring range : 1-15 ppm  
Number of pump strokes : 3 (300ml)
- 2) Sampling time : 4.5 minutes/3 pump strokes
- 3) Detectable limit : 0.5 ppm
- 4) Shelf life : 3 years
- 5) Operating temperature : 10 ~ 40 °C
- 6) Temperature compensation : Necessary (See "TEMPERATURE CORRECTION TABLE")
- 7) Reading : Direct reading from the scale calibrated by 3 pump strokes
- 8) Colour change : Pale pink → Yellow

## 2. RELATIVE STANDARD DEVIATION

RSD-low : 10 % RSD-mid. : 5 % RSD-high : 5 %

## 3. CHEMICAL REACTION

By decomposing with an Oxidizer, Formic acid is produced and PH indicator is discoloured.



## 4. CALIBRATION OF THE TUBE

GAS CHROMATOGRAPHY

## 5. INTERFERENCE AND CROSS SENSITIVITY

Substance	Interference	Coexistence
Aldehydes FIG.2	Similar stain is produced.	Higher readings are given.
Sulphur dioxide	Pale yellow stain is produced.	∕
Hydrogen sulphide FIG.1	∕	∕

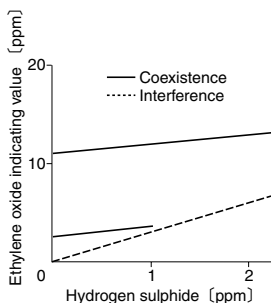


FIG.1 Influence of Hydrogen sulphide

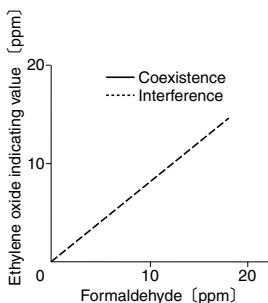


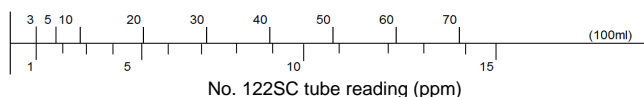
FIG.2 Influence of Formaldehyde

TEMPERATURE CORRECTION TABLE

Scale Readings (ppm)	True Concentration (ppm)			
	10 °C (50° F)	15-25 °C (59° F)	30 °C (86° F)	40 °C (77° F)
15	19	15	13	10
10	12.5	10	8.5	7
5	6	5	4	3.5
1	1	1	1	1

## CONVERSION CHART FOR PROPYLENE OXIDE DETECTION BY NO. 122SC TUBE

Propylene oxide concentration (ppm)



(Note) This chart is applicable for 20 degrees C in temperature and 1 pump stroke of sampling conditions