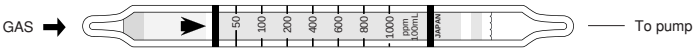
Tube No.
122SL

ETHYLENE OXIDE



1. PERFORMANCE

1) Measuring range	: 130-2,600 ppm	50-1,000 ppm
Number of pump strokes	1/2 (50mℓ)	1 (100mℓ)
2) Sampling time	: 1.5 minutes/1 pump stroke	
3) Detectable limit	: 10 ppm (100mℓ)	
4) Shelf life	: 3 years	
5) Operating temperature	: 10 ~ 40 ℃	
6) Temperature compensation	: Necessary (See "TEMPERATURE CORRECTION TABLE")	
7) Reading	: Direct reading from the scale calibrated by 1 pump stroke	
8) Colour change	: Yellow → Pale blue	

2. RELATIVE STANDARD DEVIATION

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

3. CHEMICAL REACTION

Chromic oxide is reduced.

$(CH_2)_2O + Cr^{6+} + H_2SO_4 \rightarrow Cr^{3+}$

4. CALIBRATION OF THE TUBE

GAS CHROMATOGRAPHY

5. INTERFERENCE AND CROSS SENSITIVITY

Substance	Interference	Coexistence
Alcohols	Similar stain is produced.	Higher readings are given.
Esters	〃	〃
Ethers	〃	〃
Ketones	〃	〃
Aliphatic hydrocarbons (over C_3)	〃	〃
Aromatic hydrocarbons	〃	〃
Halogenated hydrocarbons	〃	〃

(NOTE)

In case of a 1/2 pump stroke, the following formula is available for the actual concentration.

Actual concentration = 2.6 × Reading value

TEMPERATURE CORRECTION TABLE

Tube Readings (ppm)	True Concentration (ppm)						
	10 ℃ (50 ˚F)	15 ℃ (59 ˚F)	20 ℃ (68 ˚F)	25 ℃ (77 ˚F)	30 ℃ (86 ˚F)	35 ℃ (95 ˚F)	40 ℃ (104 ˚F)
1000	980	990	1000	1080	1180	1350	1570
800	780	790	800	880	970	1130	1310
600	550	575	600	670	750	880	1050
400	330	360	400	460	520	650	790
200	150	175	200	240	280	330	430
100	85	85	100	115	120	140	170
50	45	45	50	50	55	60	70

∗ In case of a 1/2 pump stroke, no temperature correction is necessary at less than 20 ℃.