

Tube No.
122SD

ETHYLENE OXIDE



1. PERFORMANCE

- 1) Measuring range : 0.7-14.0 ppm 0.1-2.0 ppm
Number of pump strokes : 1(100mL) 4(400mL)
- 2) Sampling time : 2 minutes/1 pump stroke
- 3) Detectable limit : 0.05 ppm
- 4) Shelf life : 1 year (Necessary to store in a refrigerated place ; 0~10°C)
- 5) Operating temperature : 0 ~ 40°C
- 6) Temperature compensation : Necessary (See "TEMPERATURE CORRECTION TABLE")
- 7) Reading : Direct reading from the scale calibrated by 4 pump strokes
- 8) Colour change : Yellow → Pale pink

2. RELATIVE STANDARD DEVIATION

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

3. CHEMICAL REACTION

Formaldehyde is produced and PH indicator is discoloured.

4. CALIBRATION OF THE TUBE

PERMEATION TUBE METHOD

5. INTERFERENCE AND CROSS SENSITIVITY

Substance	Interference	ppm	Coexistence
Formaldehyde	Higher readings are given.	0.5	

(IN CASE OF 4 PUMP STROKES)

TABLE OF THE COEFFICIENT FOR TEMPERATURE CORRECTION (20°C STANDARD)

Temp(°C)	0	1	2	3	4	5	6	7	8	9
0	2.21	2.13	2.05	1.98	1.91	1.84	1.77	1.70	1.64	1.58
10	1.51	1.45	1.40	1.34	1.29	1.24	1.19	1.14	1.09	1.05
20	1.00	0.96	0.92	0.88	0.85	0.82	0.78	0.75	0.72	0.70
30	0.67	0.65	0.63	0.61	0.59	0.57	0.56	0.55	0.54	0.53
40	0.52	--	--	--	--	--	--	--	--	--

(IN CASE OF 1 PUMP STROKE)

TEMPERATURE CORRECTION TABLE(20°C STANDARD)

Tube Readings (ppm)	True Concentration (ppm)									
	0°C (32°F)	5°C (41°F)	10°C (50°F)	15°C (59°F)	20°C (68°F)	25°C (77°F)	30°C (86°F)	35°C (95°F)	40°C (104°F)	
2.0	--	--	--	--	14.0	10.4	9.2	8.8	8.6	
1.8	--	--	--	--	12.6	9.4	8.3	7.9	7.7	
1.6	--	--	--	--	11.2	8.3	7.4	7.0	6.9	
1.4	--	--	--	15.4	9.8	7.3	6.4	6.2	6.0	
1.2	--	--	--	13.2	8.4	6.2	5.5	5.3	5.2	
1.0	--	--	--	11.0	7.0	5.2	4.6	4.4	4.3	
0.8	--	--	16.0	8.8	5.6	4.2	3.7	3.5	3.4	
0.6	--	21.0	12.0	6.6	4.2	3.1	2.8	2.6	2.6	
0.4	22.0	14.0	8.0	4.4	2.8	2.1	1.8	1.8	1.7	
0.2	11.0	7.0	4.0	2.2	1.4	1.0	0.9	0.9	0.9	
0.1	5.5	3.5	2.0	1.1	0.7	0.5	0.5	0.4	0.4	