



1. PERFORMANCE

- 1) Measuring range : 2-100 ppm 1-50 ppm
 Number of pump strokes 2 (200mℓ) 4 (400mℓ)
- 2) Sampling time : 2 minutes / 2 pump strokes
- 3) Detectable limit : 0.2 ppm (400mℓ)
- 4) Shelf life : 3 years
- 5) Operating temperature : 0 ~ 40 °C
- 6) Temperature compensation : Necessary (See "TEMPERATURE CORRECTION TABLE")
- 7) Reading : Direct reading from the scale calibrated by 2 pump strokes
- 8) Colour change : White → Yellow

2. RELATIVE STANDARD DEVIATION

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

3. CHEMICAL REACTION

A polymer of Styrene is produced by fume sulphuric acid.



4. CALIBRATION OF THE TUBE

DIFFUSION TUBE METHOD

5. INTERFERENCE AND CROSS SENSITIVITY

Substance	Interference	ppm	Coexistence
Acrylonitrile	The accuracy of readings is not affected.	400	Lower readings are given.
Butadiene	Pale orange stain is produced.	5	Higher readings are given.
Formaldehyde	The accuracy of readings is not affected.	15	∕
Acetaldehyde	Orange stain is produced.	350	∕
Methyl alcohol	The accuracy of readings is not affected.	3500	∕
Ethyl alcohol	∕	1800	∕
Ethyl acetate	∕	700	∕
Butyl acetate	∕	700	∕

(NOTE)

In case of 4 pump strokes, following formula is available for actual concentration.

Actual concentration = $1/2 \times$ Reading value.

TEMPERATURE CORRECTION TABLE

Temperature : To correct for temperature, multiply the tube reading by the following factors.

Temperature (°C)	0	1	2	3	4	5	6	7	8	9
Correction Factor	0.80	0.81	0.82	0.83	0.84	0.85	0.86	0.87	0.88	0.89
Temperature (°C)	10	11	12	13	14	15	16	17	18	19
Correction Factor	0.90	0.91	0.92	0.93	0.94	0.95	0.96	0.97	0.98	0.99
Temperature (°C)	20	21	22	23	24	25	26	27	28	29
Correction Factor	1.00	1.01	1.02	1.03	1.04	1.05	1.06	1.07	1.08	1.09
Temperature (°C)	30	31	32	33	34	35	36	37	38	39
Correction Factor	1.10	1.11	1.12	1.13	1.14	1.15	1.16	1.17	1.18	1.19
Temperature (°C)	40									
Correction Factor	1.20									