

1. PERFORMANCE

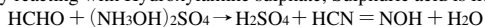
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|-----------------------------|--|---|
| 1) Measuring range | : 0.10-2.0 ppm (125 -2,500 $\mu\text{g}/\text{m}^3$) | 0.05-1.0 ppm (62 - 1,250 $\mu\text{g}/\text{m}^3$) |
| 2) Sampling volume | : 4.5L (300mL/min \times 15min) | 9L (300mL/min \times 30min) |
| 3) Sampling time | : 15 minutes | 30 minutes |
| 4) Detectable limit | : 0.005 ppm (300mL/min \times 30min) | |
| 5) Shelf life | : 1 year (Necessary to store in refrigerated conditions ; 0 ~ 10°C) | |
| 6) Operating temperature | : 10 ~ 35°C | |
| 7) Temperature compensation | : Necessary (See "TEMPERATURE CORRECTION COEFFICIENT TABLE") | |
| 8) Operating humidity | : 10 ~ 90%R.H. | |
| 9) Reading | : Direct reading from the scale calibrated at the sampling of 300mL/min \times 30min | |
| 10) Colour change | : Yellowish orange \rightarrow Pink | |

2. RELATIVE STANDARD DEVIATION

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

3. CHEMICAL REACTION

By reacting with Hydroxylamine sulphate, Sulphuric acid is liberated.



4. CALIBRATION OF THE TUBE

DNPH-HPLC METHOD

5. INTERFERENCE AND CROSS SENSITIVITY

Substance	ppm	Interference	ppm	Coexistence
Ammonia	—	The accuracy of readings is not affected.	0.5	Discolouration layer fades from the inlet side of the stain.
Amines	—	∕	0.5	∕
Nitrogen dioxide	0.5	Similar stain is produced.	0.5	Higher readings with indiscernable maximum end point of the stain are given.
Acetaldehyde	—	∕	—	Higher readings are given.
Acetone	—	∕	—	∕

(NOTE)

- 1) Air sampler is required for this tube.
- 2) In case of 4.5L sampling, following formula is available for the actual concentration.
Actual concentration = 2 \times Temperature corrected value

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

Temp(C)	0	1	2	3	4	5	6	7	8	9
10	1.16	1.14	1.13	1.11	1.10	1.08	1.06	1.05	1.03	1.02
20	1.00	0.98	0.97	0.95	0.94	0.92	0.90	0.89	0.87	0.86
30	0.84	0.82	0.81	0.79	0.78	0.76	—	—	—	—