

## 1. PERFORMANCE

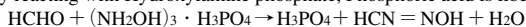
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|-----------------------------|--|--|
| 1) Measuring range          | : 0.04-0.48 ppm (50-600 $\mu\text{g}/\text{m}^3$ )                                     | 0.01-0.12 ppm (13-150 $\mu\text{g}/\text{m}^3$ ) |
| 2) Sampling volume          | : 3L (300mL/min $\times$ 10min)  | 9L (300mL/min $\times$ 30min)                    |
| 3) Sampling time            | : 10 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       | : 5 ~ 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 phosphate, Phosphoric acid is liberated.



## 4. CALIBRATION OF THE TUBE

DNPH-HPLC

## 5. INTERFERENCE AND CROSS SENSITIVITY

Substance	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	Similar stain is produced.	0.5	Higher readings with indiscernible 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 3L sampling, following formula is available for the actual concentration.  
Actual concentration = 4  $\times$  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	1.40	1.36	1.32	1.28	1.24	1.20	1.16	1.12	1.08	1.04
20	1.00	0.97	0.94	0.91	0.88	0.85	0.82	0.79	0.76	0.73
30	0.70	0.67	0.64	0.61	0.58	0.55	—	—	—	—