



1. PERFORMANCE

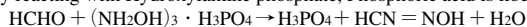
- 1) Measuring range : 0.01 ~ 0.50 ppm (12.5 ~ 625 $\mu\text{g}/\text{m}^3$)
- 2) Sampling volume : 3.5L (350mL/min \times 10min)
- 3) Sampling time : 10 minutes
- 4) Detectable limit : 0.005 ppm
- 5) Shelf life : 1 year (Necessary to store in refrigerated conditions ; 0 ~ 10°C)
- 6) Operating temperature : 10 ~ 35°C
- 7) Temperature compensation : Necessary (See "TEMPERATURE CORRECTION TABLE")
- 8) Operating humidity : 5 ~ 90%R.H.
- 9) Reading : Direct reading from the scale calibrated at sampling volume of 350mL \times 10min
- 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 METHOD

5. INTERFERENCE AND CROSS SENSITIVITY

| Substance | Interference | ppm | Coexistence |
|------------------|---|-----|--|
| Ammonia | The accuracy of readings is not affected. | 1.0 | Discolouration layer fades from the inlet side of the stain. |
| Amines | ∕ | 1.0 | ∕ |
| Ethanol | ∕ | 200 | Higher readings are given. |
| Nitrogen dioxide | Similar stain is produced. | 1.0 | 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.

TEMPERATURE CORRECTION TABLE

| Tube Readings (ppm) | True Concentration (ppm) | | | | | |
|---------------------|--------------------------|-------------|-------------|-------------|-------------|-------------|
| | 10°C (50°F) | 15°C (59°F) | 20°C (68°F) | 25°C (77°F) | 30°C (86°F) | 35°C (95°F) |
| 0.50 | - | 0.780 | 0.500 | 0.390 | 0.340 | 0.290 |
| 0.40 | 0.900 | 0.520 | 0.400 | 0.310 | 0.270 | 0.230 |
| 0.30 | 0.550 | 0.370 | 0.300 | 0.230 | 0.200 | 0.170 |
| 0.20 | 0.330 | 0.250 | 0.200 | 0.155 | 0.135 | 0.115 |
| 0.10 | 0.150 | 0.120 | 0.100 | 0.080 | 0.070 | 0.060 |
| 0.05 | 0.070 | 0.060 | 0.050 | 0.040 | 0.035 | 0.030 |
| 0.01 | 0.020 | 0.015 | 0.010 | 0.008 | 0.007 | 0.006 |