

1. PERFORMANCE

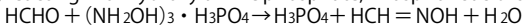
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|-----------------------------|--|--------------|
| 1) Measuring range | : 0.1-4.0 ppm | 0.05-2.0 ppm |
| Number of pump strokes | 5 (500mL) | 10 (1000mL) |
| 2) Sampling time | : 5 minutes / 5 pump strokes | |
| 3) Detectable limit | : 0.03 ppm (1000mL) | |
| 4) Shelf life | : 1 year (Necessary to store in refrigerated conditions; 0~10°C) | |
| 5) Operating temperature | : 10~40°C | |
| 6) Temperature compensation | : Necessary (See "TEMPERATURE CORRECTION TABLE") | |
| 7) Operating humidity | : 5~90%R.H. | |
| 8) Reading | : Direct reading from the scale calibrated by 5 pump strokes | |
| 9) Colour change | : Yellowish orange → 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 and pH indicator is discoloured.



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.	10	Lower readings are given. Inlet side of the stain is faded.
Nitrogen dioxide	3	Similar stain is produced.	3	Higher readings with indiscernable maximum end point of the stain are given.
Acetaldehyde	—	//	—	Higher readings are given.
Toluene	—	The accuracy of readings is not affected.	—	The accuracy of readings is not affected.
Methanol	—	//	—	//

(NOTE)

In case of 10 pump strokes, following formula is available for the actual concentration.

Actual concentration = 1/2 × Temperature corrected value

TEMPERATURE CORRECTION TABLE

Tube Readings (ppm)	Corrected Concentration (ppm)			
	10°C (50°F)	20°C (68°F)	30°C (86°F)	40°C (104°F)
4.0	6.4	4.0	2.4	1.6
3.5	5.6	3.5	2.1	1.4
3.0	4.8	3.0	1.8	1.2
2.5	4.0	2.5	1.5	1.0
2.0	3.2	2.0	1.2	0.8
1.5	2.4	1.5	0.9	0.6
1.0	1.6	1.0	0.6	0.4
0.5	0.8	0.5	0.3	0.2
0.3	0.5	0.3	0.18	0.12
0.1	0.16	0.1	0.06	0.04