



1. PERFORMANCE

- 1) Measuring range : 1-30 ppm
- Number of pump stroke : 1 (100mL)
- 2) Sampling time : 3 minutes / 1 pump stroke
- 3) Detectable limit : 0.4 ppm
- 4) Shelf life : 3 years
- 5) Operating temperature : 10~40°C
- 6) Temperature compensation : Necessary (See "TEMPERATURE CORRECTION TABLE")
- 7) Operating humidity : 10~90%R.H.
- 8) Reading : Direct reading from the scale calibrated by 1 pump stroke
- 9) Colour change : Pink → Pale yellow

2. RELATIVE STANDARD DEVIATION

RSD-low : 15% RSD-mid. : 10% RSD-high : 10%

3. CHEMICAL REACTION

By reacting with pre-treatment reagents, acidic substance is produced and pH indicator is discoloured.
 $\text{CH}_3\text{CHO} + \text{Cr}^{6+} \rightarrow \text{Acid}$

4. CALIBRATION OF THE TUBE

DNPH-HPLC method

5. INTERFERENCE AND CROSS SENSITIVITY

Substance	ppm	Interference	ppm	Coexistence
Formaldehyde	below 20	The accuracy of readings is not affected.	10	Lower readings are given.
Ethanol	—	Similar stain is produced.	0.2	Higher readings are given.
Acetic acid	below 160	The accuracy of readings is not affected.	below 160	The accuracy of readings is not affected.
Acetone	below 100	//	below 100	//
Ammonia	below 70	//	below 70	//

TEMPERATURE CORRECTION TABLE

Tube Readings (ppm)	Corrected 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)	40°C (104°F)	
30	40.8	35.4	30.0	27.2	24.5	21.7	18.9	
25	34.2	29.6	25.0	22.6	20.2	17.8	15.4	
20	27.3	23.7	20.0	18.1	16.1	14.2	12.2	
18	24.6	21.3	18.0	16.2	14.5	12.7	10.9	
16	21.9	19.0	16.0	14.4	12.8	11.2	9.6	
14	19.1	16.6	14.0	12.6	11.2	9.7	8.3	
12	16.4	14.2	12.0	10.8	9.6	8.3	7.1	
10	13.7	11.9	10.0	9.0	8.0	6.9	5.9	
7	9.6	8.3	7.0	6.3	5.6	4.8	4.1	
5	6.9	6.0	5.0	4.5	4.0	3.4	2.9	
3	4.4	3.7	3.0	2.7	2.3	2.0	1.6	
1	1.8	1.4	1.0	0.9	0.8	0.7	0.6	