

1. PERFORMANCE

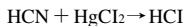
- | | | | | |
|-----------------------------|---|------------|------------|-----------|
| 1) Measuring range | : 1-20 ppm | 0.5-10 ppm | 0.25-5 ppm | 0.2-4 ppm |
| Number of pump strokes | 1 (100mℓ) | 2 (200mℓ) | 4 (400mℓ) | 5 (500mℓ) |
| 2) Sampling time | : 1.5 minutes/1 pump stroke | | | |
| 3) Detectable limit | : 0.05ppm (500mℓ) | | | |
| 4) Shelf life | : 1 year (Necessary to store in refrigerated place ; 0 ~ 10 °C) | | | |
| 5) Operating temperature | : 0 ~ 40 °C | | | |
| 6) Temperature compensation | : Necessary (See "TEMPERATURE CORRECTION TABLE") | | | |
| 7) Reading | : Direct reading from the scale calibrated by 1 pump stroke | | | |
| 8) Colour change | : Yellow → Red | | | |

2. RELATIVE STANDARD DEVIATION

RSD-low : 10% RSD-mid. : 5% RSD-high : 5%

3. CHEMICAL REACTION

By decomposing with an Oxidizer, Hydrogen cyanide is produced, Hydrogen cyanide reacts with Mercuric chloride, then Hydrogen chloride is liberated and PH indicator is discoloured.



4. CALIBRATION OF THE TUBE

GAS CHROMATOGRAPHY

5. INTERFERENCE AND CROSS SENSITIVITY

Substance	Interference	ppm		Coexistence
		Less than		
Butadiene		350	ppm	Not affected.
Toluene		600	ppm	∕
Hexane		800	ppm	∕
Styrene		720	ppm	∕

(NOTE)

In case of 2 to 5 pump strokes can be used to determine the lower concentration.

Following formula is available for actual concentration.

$$\text{Actual concentration} = \text{Temperature corrected value} \times \frac{1}{\text{Number of strokes}}$$

TEMPERATURE CORRECTION TABLE

Scale Readings (ppm)	True Concentration (ppm)							
	0 °C (32 °F)	10 °C (50 °F)	20 °C (68 °F)	30 °C (86 °F)	40 °C (104 °F)	50 °C (122 °F)	60 °C (140 °F)	70 °C (158 °F)
20	26	22.5	20	18	17	16	15	14
18	23	20	18	16.5	15.5	14.5	13.5	12.5
16	20.5	18	16	15	14	13	12	11
14	18	15.5	14	13	12	11	10	9
12	15.5	13.5	12	11	10.5	9.5	8.5	7.5
10	13	11	10	9.5	9	8	7.5	7
8	10.5	9	8	7.5	7	6	5.5	5
6	8	7	6	6	5.5	5	4.5	4
4	5.5	4.5	4	4	4	3.5	3	2.5
2	3	2	2	2	2	1.5	1	1
1	1.5	1	1	1	1	1	1	1