HYDROGEN CYANIDE



1. PERFORMANCE

1) Measuring range 0.3-8 ppmNumber of pump strokes $3(300\text{m}\ell)$

2) Sampling time : 4.5 minute s/3 pump strokes

3) Detectable limit : $0.15 \text{ ppm} (300 \text{m} \ell)$

4) Shelf life : 1 year (Necessary to store in refrigerated conditions; $0 \sim 10 \, ^{\circ}\text{C}$)

5) Operating temperature : $0 \sim 40 \,^{\circ}\text{C}$

6) Temperature compensation : Necessary (See "TEMPERATURE CORRECTION TABLE") 7) Reading : Direct reading from the scale calibrated by 3 pump strokes

8) Colour change : Yellow→Red

2. RELATIVE STANDARD DEVIATION

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

3. CHEMICAL REACTION

Hydrogen cyanide reacts with Mercuric chloride and liberates hydrogen chloride, then PH indicator is discoloured. HCN + HgCl2→HCl

4. CALIBRATION OF THE TUBE

ABSORPTIOMETRIC METHOD

5. INTERFERENCE AND CROSS SENSITIVITY

Substance	Interference	ppm	n Coexistence	
Sulphur dioxide	Red stain is produced.	1.0	Higher readings are given.	
Hydrogen sulphide	"		"	
Acrylonitrile	"		"	
Phosphine	"		"	
Ammonia		2.0	Lower readings are given.	

TEMPERATURE CORRECTION TABLE

Tube	corrected Concentration (ppm)					
Readings (ppm)	0 °C (32 °F)	10 °C (50 °F)	20 °C (68 °F)	30 ℃ (86 °F)	40°C (104°F)	
8	10.0	8.8	8.0	7.5	7.0	
7	8.3	7.6	7.0	6.6	6.2	
6	6.9	6.4	6.0	5.6	5.4	
5	5.8	5.2	5.0	4.8	4.5	
4	4.5	4.2	4.0	3.8	3.7	
3	3.4	3.2	3.0	2.9	2.8	
2	22	2.1	2.0	1.9	1.8	
1	1.1	1.1	1.0	0.9	0.9	
0.6	0.7	0.7	0.6	0.5	0.5	
0.3	0.3	0.3	0.3	0.3	0.3	