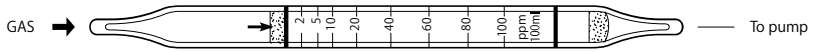
Tube No.
112SB

HYDROGEN CYANIDE



1. PERFORMANCE

1) Measuring range : 2-100 ppm 0.5-25 ppm
   Number of pump strokes 1(100mL) 4(400mL)
2) Sampling time : 1 minute/1 pump stroke
3) Detectable limit : 0.2 ppm (400mL)
4) Shelf life : 2 years (Necessary to store in refrigerated conditions ; 0 ～10℃)
5) Operating temperature : 0～40℃
6) Operating humidity : 10～90%R.H. (Humidity correction is necessary)
7) Humidity compensation : Necessary (See "HUMIDITY CORRECTION TABLE")
8) Reading : Direct reading from the scale calibrated by 1 pump stroke
9) Colour change : Yellow→Red

2. RELATIVE STANDARD DEVIATION

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

3. CHEMICAL REACTION

By reacting with Mercury chloride, Hydrogen chloride is liberated and PH indicator is discoloured.

$HCN + HgCl_2 \rightarrow HCl$

4. CALIBRATION OF THE TUBE

ABSORPTIOMETRIC METHOD

5. INTERFERENCE AND CROSS SENSITIVITY

Substance	Interference	ppm	Coexistence
Sulphur dioxide	Similar stain is produced.	1	Higher readings are given.
Phosphine	〃	1	〃
Hydrogen sulphide FIG.1	〃	3	〃
Ammonia	The accuracy of readings is not affected.	5	Lower readings are given.

(NOTE)

In case of 4 pump strokes, following formula is available for the actual concentration.

Actual concentration = Reading value $\times \frac{1}{4}$

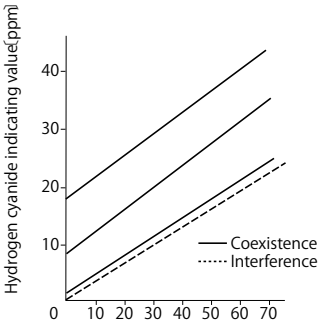


FIG.1 Influence of Hydrogen sulphide

HUMIDITY CORRECTION TABLE

Tube Readings (ppm)	Corrected Concentration (ppm)				
	10%R.H.	30%R.H.	50%R.H.	70%R.H.	90%R.H.
100	91.0	95.0	100.0	105.0	111.0
80	73.0	76.0	80.0	84.0	88.5
60	54.5	57.0	60.0	63.0	66.0
40	36.0	38.0	40.0	42.0	44.5
20	18.0	19.0	20.0	21.0	22.5
10	8.4	9.2	10.0	10.8	11.6
5	4.2	4.6	5.0	5.4	5.8
2	2.0	2.0	2.0	2.0	2.0