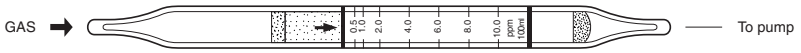
Tube No.
121SD

PHOSPHINE



1. PERFORMANCE

1) Measuring range	: 0.5-10.0 ppm	0.25-5.0 ppm	1-20 ppm
Number of pump strokes	1 (100mℓ)	2 (200mℓ)	1/2 (50mℓ)
2) Sampling time	: 1 minute/1 pump stroke		
3) Detectable limit	: 0.1 ppm (200mℓ)		
4) Shelf life	: 1 year		
5) Operating temperature	: 0 ~ 40℃		
6) Reading	: Direct reading from the scale calibrated by 1 pump stroke		
7) Colour change	: Yellow → Pink		

2. RELATIVE STANDARD DEVIATION

RSD-low : 15 % RSD-mid. : 10 % RSD-high : 5 %

3. CHEMICAL REACTION

By reacting with Mercuric chloride (II), Hydrogen chloride is produced and PH indicator is discoloured.

$PH_3 + 3HgCl_2 \rightarrow P(HgCl)_3 + 3HCl$

4. CALIBRATION OF THE TUBE

STANDARD GAS CYLINDER METHOD

5. INTERFERENCE AND CROSS SENSITIVITY

Substance	Interference	ppm	Coexistence
Ammonia		20	A stained layer at the side of gas inlet is bleached out and lower readings are given.
Hydrogen sulphide	Similar stain is produced.	50	Higher readings are given.
Mercaptans	〃		〃

(NOTE)

When the concentration is below 0.5ppm, 2 pump strokes can be used to determine the lower concentration with the following formula ;
Actual concentration = 1/2 × Reading value

When the concentration is over 10.0ppm, 1/2 pump strokes can be used to determine the higher concentration with the following formula ;
Actual concentration = 2 × Reading value