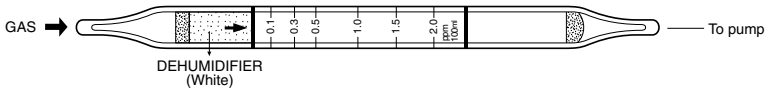
Tube No.
121U

PHOSPHINE



1. PERFORMANCE

1) Measuring range ： 0.1-2.0 ppm 0.05-1.0 ppm
Number of pump strokes 1（100mℓ） 2（200mℓ）
2) Sampling time ： 1 minute/1 pump stroke
3) Detectable limit ： 0.02 ppm（200mℓ）
4) Shelf life ： 2 years
5) Operating temperature ： 0～40℃
6) Reading ： Direct reading from the scale calibrated by 1 pump stroke
7) Colour change ： Pale yellow→Pink

2. RELATIVE STANDARD DEVIATION

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

3. CHEMICAL REACTION

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

$PH_3 + HgCI_2 \rightarrow P(HgCI)_3 + HCI$

4. CALIBRATION OF THE TUBE

STANDARD GAS CYLINDER METHOD

5. INTERFERENCE AND CROSS SENSITIVITY

Substance	Interference	Coexistence
Hydrogen sulphide	Similar stain is produced.	Higher readings are given.
Hydrogen selenide	〃	〃
Mercaptans	〃	〃
Arsine	〃	〃
Hydrogen cyanide	Whole reagent is changed to Red.	〃
Sulphur dioxide	Whole reagent is changed to Pale red,but Purplish red stain indicates Phosphine concentration.	〃

（NOTE）

When the concentration is below 0.5 ppm, 2 pump strokes can be used to determine the lower concentration.
Following formula is available for the actual concentration.
Actual concentration ＝ 1/2 × Reading value