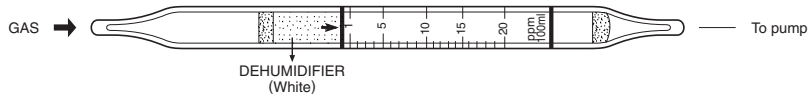
Tube No.
120SE

HYDROGEN SULPHIDE



1. PERFORMANCE

1) Measuring range	: 2-40 ppm	1-20 ppm	0.5-10 ppm
Number of pump strokes	1/2 (50mℓ)	1 (100mℓ)	2 (200mℓ)
2) Sampling time	: 1 minute/1 pump stroke		
3) Detectable limit	: 0.2 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	: Yellow → Pink		

2. RELATIVE STANDARD DEVIATION

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

3. CHEMICAL REACTION

By reacting with mercuric chloride, Hydrogen chloride is produced and PH indicator is discoloured.

$H_2S + HgCl_2 \rightarrow HgS + 2HCl$

4. CALIBRATION OF THE TUBE

PERMEATION TUBE METHOD

5. INTERFERENCE AND CROSS SENSITIVITY

Substance	Interference	Coexistence
Phosphine	Similar stain is produced.	Higher readings are given.
Mercaptans	〃	〃
Arsine	〃	Higher readings are given.
Hydrogen selenide	〃	〃
Hydrogen cyanide	〃	〃
Nitrogen dioxide	The accuracy of readings is not affected.	Lower readings are given.
Ammonia	Pale brown stain is produced.	〃
Sulphur dioxide	〃	If the maximum end point of the pink stain is discernable, the accuracy of readings is not affected.

(NOTE)

In case of 1/2 and 2 pump strokes, the following equation is available for the actual concentration.

1/2 pump strokes : Actual concentration = Reading value × 2

2 pump strokes : Actual concentration = Reading value ÷ 2

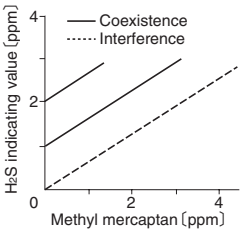


FIG.1 Influence of Methyl mercaptan

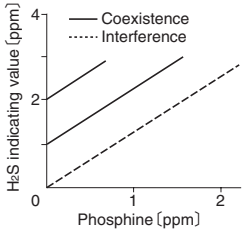


FIG.2 Influence of Phosphine