



## 1. PERFORMANCE

### 1) Measuring range

Hydrogen sulphide : 1-30 ppm

Mercaptans

Methyl mercaptan : 0.9-6.1 ppm

Ethyl mercaptan : 1.1-6.3 ppm

n-Propyl mercaptan : 1.2-7.1 ppm

iso-Propyl mercaptan : 1.2-6.5 ppm

tert-Butyl mercaptan : 1.1-6.6 ppm

Number of pump strokes : 1(100mL)

2) Sampling time : 3 minutes/1 pump stroke

### 3) Detectable limit

Hydrogen sulphide : 0.2 ppm

Mercaptans : -

4) Shelf life : 2 years

5) Operating temperature : 0~40°C

### 6) Operating humidity

Hydrogen sulphide : 0~100%R.H.

Mercaptans : 0~80%R.H.

7) Reading : Direct reading from the scale calibrated by 1 pump stroke

### 8) Colour change

Hydrogen sulphide : White → Pale brown

Mercaptans : Pale yellow → Pink

## 2. RELATIVE STANDARD DEVIATION

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

## 3. CHEMICAL REACTION

Hydrogen sulphide detector tube :  $\text{H}_2\text{S} + \text{Pb}(\text{CH}_3\text{CO}_2)_2 \rightarrow \text{PbS} + 2\text{CH}_3\text{CO}_2\text{H}$

Mercaptans detector tube :  $\text{R} \cdot \text{SH} + \text{HgCl}_2 \rightarrow \text{RS}(\text{HgCl}) + \text{HCl}$

## 4. CALIBRATION OF THE TUBE

Hydrogen sulphide STANDARD GAS CYLINDER METHOD

Mercaptans STANDARD GAS CYLINDER METHOD

## 5. INTERFERENCE AND CROSS SENSITIVITY

Substance	Interference	ppm	Coexistence
<b>H<sub>2</sub>S detector tube</b>			
Sulphur dioxide	The accuracy of readings is not affected.	H <sub>2</sub> S conc. × 1/3	The maximum end point of the stain becomes indiscernible and higher readings are given.
Nitrogen dioxide	"	H <sub>2</sub> S conc. × 1/5	Lower readings are given.
<b>R·SH detector tube</b>			
Nitrogen dioxide	The accuracy of readings is not affected.	2	Lower readings are given.
Ammonia	"	R·SH conc. × 10	The stain from the gas inlet side is faded and lower readings are given.
Hydrogen sulphide		30	The maximum end point of the stain becomes indiscernible.