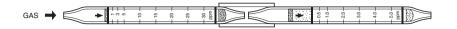
HYDROGEN SULPHIDE · MERCAPTANS



1. PERFORMANCE

1) Measuring range:

Hydrogen sulphide 1-30 ppm Mercaptans 0.5-5 ppm Number of pump strokes $1(100 \text{m}\ell)$

2) Sampling time : 3 minutes/1 pump stroke

3) Detectable limit

 $\begin{array}{lll} \mbox{Hydrogen sulphide} & 0.2 \mbox{ ppm} \\ \mbox{Mercaptans} & 0.2 \mbox{ ppm} \\ \mbox{4) Shelf life} & \vdots 2 \mbox{ years} \\ \mbox{5) Operating temperature} & \vdots 0 \sim 40 \mbox{ $^{\circ}$C} \end{array}$

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

7) Colour change:

Hydrogen sulphide White→Dark 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 : $H_2S + Pb(CH_3CO_2)_2 \rightarrow PbS + 2CH_3CO_2H$

Mercaptans detector tube : $R \cdot SH + HgCI_2 \rightarrow RS (HgCI) + HCI$

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
H₂S detector tube			
Sulphur dioxide	The accuracy of readings is not affected.	H ₂ S conc. × 1/3	The maximum end point of the stain becomes indiscernable and higher readings are given.
Nitrogen dioxide	"	H ₂ S conc. × 1/5	Lower readings are given.
R·SH detector tube			
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 indiscernable.