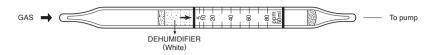
tert-BUTYL MERCAPTAN



1. PERFORMANCE

1) Measuring range Solution Strokes Solution Strokes Solution Sol

3) Detectable limit $1 \text{ ppm} (100 \text{m} \ell)$ 4) Shelf life 2 years5) Operating temperature $0 \sim 40 \text{ C}$

6) Reading : The tube scale is calibrated based on Ethyl mercaptan at 1/2 pump strokes

and the tube has the same sensitivity for tert-Butyl mercaptan

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, Hydrogen chloride is produced and PH indicator is discoloured. (CH₃)₃CSH + HgCl₂→(CH₃)₃S(HgCl)+ HCl

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.
Phosphine	"	"
Other mercaptans	"	"
Arsine	"	"
Hydrogen selenide	"	"
Hydrogen cyanide	"	"
Nitrogen dioxide	The accuracy of readings is not affected.	Lower readings are given.
Ammonia	"	"
Sulphur dioxide	Whole layer is discoloured to Pale red.	The accuracy of reading is not affected if the maximum end point of stained layer is discernable.

(NOTE)

In case of a 1 pump stroke, following formula is available for the actual concentration.

Actual concentration = $0.5 \times$ Reading value