

## 1. PERFORMANCE

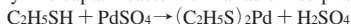
- |                             |  |           |           |
|-----------------------------|--|-----------|-----------|
| 1) Measuring range          | : 4-160 ppm  | 2-80 ppm  | 1-40 ppm  |
| Number of pump strokes      | 1 (100mℓ)  | 2 (200mℓ) | 4 (400mℓ) |
| 2) Sampling time            | : 3 minutes/2 pump strokes                                   |           |           |
| 3) Detectable limit         | : 0.2 ppm (200mℓ)  |           |           |
| 4) Shelf life               | : 2 years  |           |           |
| 5) Operating temperature    | : 0 ~ 40 °C  |           |           |
| 6) Temperature compensation | : Necessary (0 ~ 20 °C) (See "TEMPERATURE CORRECTION TABLE") |           |           |
| 7) Reading                  | : Direct reading from the scale calibrated by 2 pump strokes |           |           |
| 8) Colour change            | : White → Yellow   |           |           |

## 2. RELATIVE STANDARD DEVIATION

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

## 3. CHEMICAL REACTION

Ethyl mercaptan reacts with Palladium sulphate.



## 4. CALIBRATION OF THE TUBE

STANDARD GAS CYLINDER METHOD

## 5. INTERFERENCE AND CROSS SENSITIVITY

Substance	ppm	Interference	ppm	Coexistence
Carbon monoxide	150	Dark grey stain is produced.		
Ethylene	200	∕		
Hydrogen sulphide	40	Dark brown stain is produced.		
Acetylene	20	Pale brown stain is produced.		
Methyl mercaptan	1	Reddish yellow stain is produced.		
Methyl sulphide			1	Lower readings are given.
Nitrogen dioxide			1	∕
Chlorine			0.2	∕

(NOTE)

- 1) Max. 40 ppm of Hydrogen sulphide is eliminated by pretreat reagent.
- 2) In case of 1 or 4 pump strokes, following formula is available for the actual concentration.

$$\text{Actual concentration} = \text{Temperature corrected value} \times \frac{2}{\text{Number of pump strokes}}$$

### TEMPERATURE CORRECTION TABLE

Tube Readings (ppm)	Corrected Concentration (ppm)		
	0 °C (32 °F)	10 °C (50 °F)	20-40 °C (68-104 °F)
80	91	85	80
70	80	75	70
60	69	64	60
50	57	53	50
40	45	42	40
30	33	31	30
20	21	20	20