

1. PERFORMANCE

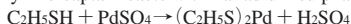
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|-----------------------------|--|-----------|-----------|
| 1) Measuring range | : 4-160 ppm | 2-80 ppm | 1-40 ppm |
| Number of pump strokes | 1 (100mℓ) | 2 (200mℓ) | 4 (400mℓ) |
| 2) Sampling time | : 3 minutes/2 pump strokes | | |
| 3) Detectable 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)

- Max. 40 ppm of Hydrogen sulphide is eliminated by pretreat reagent.
- 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