

Performance

Measuring range	0.5 to 5 ppm	5 to 120 ppm	
Number of pump strokes	2 to 10 (200 to 1000 ml)	1(100 ml)	
Correction factor	1/2 to 1/10	1	
Sampling time	3 to 15 min	1.5 min	

Detecting limit: 0.2 ppm (10 pump strokes)

Colour change : White → Yellow

Corrections for temperature & humidity: Temperature correction is necessary.

Relative standard deviation: 10 % (for 5 to 40 ppm), 5 % (for 40 to 120 ppm)

Shelf life: 3 years

Reaction principle

 $2R \cdot SH + PdSO_4 \rightarrow (RS)_2Pd + H_2SO_4$

Possible coexisting substances and their interferences

Substance	Concentration	Interference	Changes colour by itself to
Acetylene, Ethylene	≥ 2000 ppm	+	Pale brown (whole layer)
Carbon monoxide	≥ 2000 ppm	+	Fale blowii (whole layer)
Hydrogen sulphide	≥ 500 ppm	+	No

Up to 500 ppm of hydrogen sulphide is trapped in the pretreatment (white) layer.

Substances measurable with this detector tube

Substance	Correction	No. of pump strokes	Measuring range
Ethyl mercaptan	Factor : 1.0	1 to 10	0.5 to 120 ppm
Isopropyl mercaptan	Factor: 2.0	1	10 to 240 ppm
Methyl mercaptan	Factor: 0.7	1 to 10	0.35 to 84 ppm
Propyl mercaptan	Factor: 4.5	1	22.5 to 540 ppm

Calibration gas generation

Diffusion tube method