

#### Performance

This detector tube is calibrated with Ethyl mercaptan.

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

Operating conditions : Temperature 0 to 40 °C (32 to 104 °F) correction used

Relative humidity 0 to 90 % correction not used 10 % (for 5 to 40 ppm), 5 % (for 40 to 120 ppm)

Tube quantity and number of tests per box: 10 tubes for 10 tests

Shelf life: 36 months

## Reaction principle

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

Relative standard deviation:

# Possible coexisting substances and their interferences

Substance	Concentration	Interference	Changes colour by itself to
Acetylene, Ethylene	≥ 2000 ppm	+	Bolo brown (whole lever)
Carbon monoxide	≥ 2000 ppm	+	Pale brown (whole layer)
Hydrogen sulphide	$\geq$ 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