

### Performance

This detector tube is calibrated with Methyl mercaptan.

Measuring range	0.1 to 0.2 ppm	0.2 to 0.5 ppm	0.5 to 4 ppm	4 to 8 ppm
Number of pump strokes	4(400 mL)	2 (200 mL)	1(100 mL)	1/2(50 mL)
Correction factor	0.2	0.4	1	2
Sampling time	6 min	3 min	1.5 min	45 sec

Detecting limit: 0.05 ppm (4 pump strokes)

Colour change : Yellow → Red

Operating conditions : Temperature 0 to 40 °C (32 to 104 °F) correction not used

Relative humidity 30 to 90 % correction not used

Relative standard deviation: 10 % (for 0.5 to 1 ppm), 5 % (for 1 to 4 ppm) Tube quantity and number of tests per box: 10 tubes for 10 tests

Shelf life: 24 months

### Reaction principle

 $R \cdot SH + HgCl_2 \rightarrow R \cdot SHgCl + HCl$ HCl + Base  $\rightarrow$  Chloride

# Possible coexisting substances and their interferences

Substance	Concentration	Interference	Changes colour by itself to
Acid gases		+	Red
Hydrogen sulphide		No	No

Up to 200 ppm of hydrogen sulphide is trapped in the pretreatment (white) layer.

## Substances measurable with this detector tube

Substance	Correction factor	No. of pump strokes	Measuring range (ppm)
Butyl mercaptan	3.2	1/2	6.4 to 12.8
	1.6	1	0.8 to 6.4
	0.64	2	0.32 to 0.8
	0.32	4	0.16 to 0.32
tert-Butyl mercaptan	2	1/2	4 to 8
	1.0	1	0.5 to 4
	0.4	2	0.2 to 0.5
	0.2	4	0.1 to 0.2
Ethyl mercaptan	2	1/2	4 to 8
	1.0	1	0.5 to 4
	0.4	2	0.2 to 0.5
	0.2	4	0.1 to 0.2
Methyl mercaptan	2	1/2	4 to 8
	1.0	1	0.5 to 4
	0.4	2	0.2 to 0.5
	0.2	4	0.1 to 0.2
Propyl mercaptan	2.4	1/2	4.8 to 9.6
	1.2	1	0.6 to 4.8
	0.48	2	0.24 to 0.6
	0.24	4	0.12 to 0.24

### Calibration gas generation

Permeation tube method