

#### 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 → Pink

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

Relative humidity 0 to 90 % correction not used

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

Shelf life: 24 months (in the refrigerator)

# Reaction principle

Mercaptans react with the reagent to form intermediate material which stains indicator pink.

## Possible coexisting substances and their interferences

Substance	Concentration	Interference	Changes colour by itself to
Hydrogen chloride	≤ 50 ppm	No	No
Hydrogen sulphide	≤ 200 ppm	No	No

Up to 200 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
Methyl mercaptan	Factor: 0.2	4	0.1 to 0.2 ppm
	Factor: 0.4	2	0.2 to 0.5 ppm
	Factor: 1	1	0.5 to 4 ppm
	Factor: 2	1/2	4 to 8 ppm
Ethyl mercaptan	Factor: 0.25	4	0.13 to 0.25 ppm
	Factor: 0.5	2	0.25 to 0.55 ppm
	Factor: 1.1	1	0.55 to 4.4 ppm
	Factor: 2.6	1/2	4.4 to 10.4 ppm
tert-Butyl mercaptan	by scale	1	1 to 40 ppm
1-Propanethiol (Propyl mercaptan)	by scale	1	1 to 25 ppm

## Calibration gas generation

Permeation tube method

(Last updated: Feb. 2024)