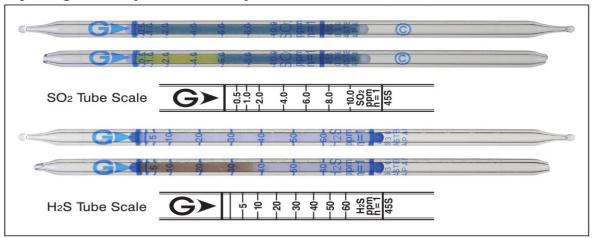




# Hydrogen Sulphide & Sulphur Dioxide H2S & SO2

# Part No.:45S

# Hydrogen Sulphide & Sulphur Dioxide (separate quantification) No.45S



When used, these tubes are to be connected. See page 2-3.

Performance

H<sub>2</sub>S tube: The minimum scale value (2.5ppm) is not printed on the tube, but only the scale line is printed.

Detector tube	SO <sub>2</sub> tube H <sub>2</sub> S tube	SO <sub>2</sub> tube H <sub>2</sub> S tube	SO <sub>2</sub> tube H <sub>2</sub> S tube
Measuring range (ppm)	0.25 to 0.5 1.25 to 2.5	0.5 to 10 (2.5) to 60	10 to 20 60 to 120
Number of pump strokes	2 (200 mL)	1 (100 mL)	1/2 (50 mL)
Correction factor	1/2	1	2
Sampling time	4 min	2 min	1 min

Detecting limit : SO<sub>2</sub>/H<sub>2</sub>S tubes : 0.05 ppm (2 pump strokes)

Colour change: SO₂ tube: Yellowish green → Yellow

H<sub>2</sub>S tube : White → Brown

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

Relative humidity 20 to 80 % correction not used

Relative standard deviation : SO<sub>2</sub> tube : 10 % (for 0.5 to 2 ppm), 5 % (for 2 to 10 ppm)

H<sub>2</sub>S tube : 10 % (for 2.5 to 20 ppm) , 5 % (for 20 to 60 ppm)

Tube quantity and number of tests per box : 10 tubes for 5 tests

Shelf life: 36 months

## Reaction principle

SO<sub>2</sub> tube : SO<sub>2</sub> + BaCl<sub>2</sub> + H<sub>2</sub>O → BaSO<sub>3</sub> + 2HCl HCl + Base → Chloride

H<sub>2</sub>S tube : H<sub>2</sub>S + Pb (CH<sub>3</sub>COO)<sub>2</sub>  $\rightarrow$  PbS + 2CH<sub>3</sub>COOH

## Possible coexisting substances and their interferences

### SO<sub>2</sub> tube

Substance	Concentration	Interference	Changes colour by itself to
Nitrogen dioxide	≥ 5ppm	+	Pale purple
Carbon monoxide, Nitric oxide		No	No

#### H<sub>2</sub>S tube

Substance	Concentration	Interference	Changes colour by itself to
Mercaptans		No	No

#### Calibration gas generation

Permeation tube method

#### Special note

When used, connect the SO $_2$  tube and the H $_2$ S tube (with both ends broken off). This twin tube can measure SO $_2$  and H $_2$ S simultaneously.