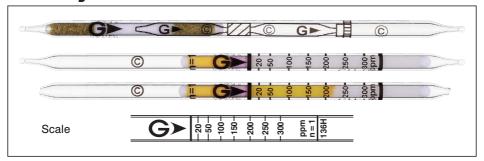
# Methyl Bromide CH3Br

## No.136H



#### Performance

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

Measuring range	10 to 20 ppm	20 to 300 ppm	300 to 600 ppm
Number of pump strokes	2 (200 mL)	1(100 mL)	1/2(50 mL)
Correction factor	1/2	1	2
Sampling time	3 min	1.5 min	45 sec

Detecting limit: 4 ppm (2 pump strokes)

Colour change: White → Yellow

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 : 10 % (for 20 to 100 ppm), 5 % (for 100 to 300 ppm)

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

Shelf life: 36 months

## Reaction principle

CH<sub>3</sub>Br + I<sub>2</sub>O<sub>5</sub> + H<sub>2</sub>S<sub>2</sub>O<sub>7</sub>  $\rightarrow$  Br<sub>2</sub> Br<sub>2</sub> + o-Tolidine  $\rightarrow$  Yellow product

## Possible coexisting substances and their interferences

Substance	Concentration	Interference	Changes colour by itself to
Bromine		+	]
Chlorine		+	
Nitrogen oxides		+	Yellow
Saturated halogenated		+	
hydrocarbons			J

Carbon tetrachloride and unsaturated halogenated hydrocarbons are trapped in the pretreatment tube.

#### Other substances measurable with this detector tube

Substance	Correction	No. of pump strokes	Measuring range
n-Butyl bromide	Factor: 1.2	1	24 to 360 ppm
1,2-Dibromoethane	Factor: 0.7	1	14 to 210 ppm
Chlorobromomethane	Factor: 0.9	1	18 to 270 ppm

#### Calibration gas generation

High pressure gas cylinder method