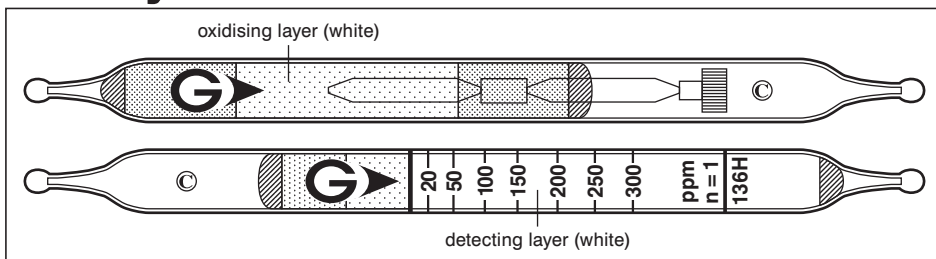


Methyl Bromide CH_3Br

No.136H



Performance

When used, these tubes are to be connected.

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 seconds

Detecting limit : 4 ppm (2 pump strokes)

Colour change : White → Yellow

Corrections for temperature & humidity : Unnecessary

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

Shelf life : 3 years

Reaction principle

Pretreatment tube : $2\text{CH}_3\text{Br} + \text{I}_2\text{O}_5 + \text{H}_2\text{S}_2\text{O}_7 \rightarrow \text{Br}_2$

Detector tube : $\text{Br}_2 + o\text{-Tolidine} \rightarrow \text{Yellow product}$

Possible coexisting substances and their interferences

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

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