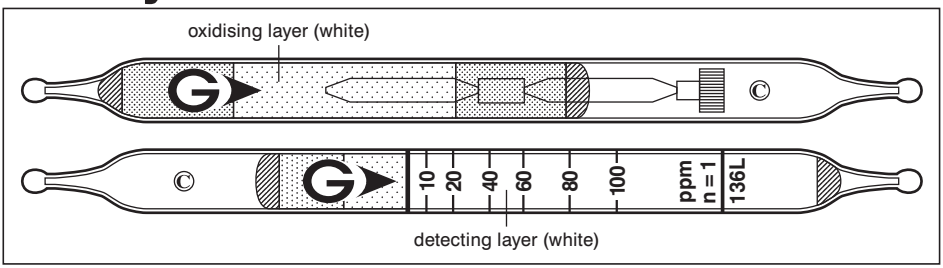
Methyl Bromide CH_3Br No.136L



When used, these tubes are to be connected.

Performance

Measuring range	2.5 to 10 ppm	10 to 100 ppm	100 to 200 ppm
Number of pump strokes	4 (400 ml)	1 (100 ml)	1/2 (50 ml)
Correction factor	1/4	1	2
Sampling time	6 min	1.5 min	45 sec

Detecting limit : 0.5 ppm (4 pump strokes)
Colour change : White → Yellow
Corrections for temperature & humidity : Unnecessary
Relative standard deviation : 10 %(for 10 to 20 ppm), 5 %(for 20 to 100 ppm)
Shelf life : 2 years

Reaction principle

Pretreatment tube : $2CH_3Br + I_2O_5 + H_2S_2O_7 \rightarrow Br_2$
Detector tube : Br_2 + o-Tolidine → Yellow product

Possible coexisting substances and their interferences

Substance	Concentration	Interference	Changes colour by itself to
Bromine, Chlorine		+	Yellow
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
Benzyl bromide	by scale	1	10 to 100 ppm
Bromoform	by scale	1	1 to 50 ppm
n-Butyl bromide	Factor : 1.0	1	10 to 100 ppm
Chloro bromomethane	Factor : 1.1	1	11 to 110 ppm
1,1-Dibromoethane	Factor : 0.7	1	7 to 70 ppm
1,2-Dibromoethane	Factor : 0.8	1	8 to 80 ppm
Dibromomethane	Factor : 0.5	1	5 to 50 ppm
Ethyl bromide	Factor : 2.0	1/2	100 to 200 ppm
	Factor : 1.0	1	10 to 100 ppm
	Factor : 0.25	4	2.5 to 10 ppm

Calibration gas generation

Permeation tube method