

Performance

When used, these tubes are to be connected.

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

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

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

Shelf life: 27 months

Reaction principle

CH₃Br + I_2O_5 + H₂S₂O₇ \rightarrow Br₂ Br₂ + o-Tolidine \rightarrow Yellow product

Possible coexisting substances and their interferences

Substance	Concentration	Interference	Changes colour by itself to	
Bromine, Chlorine		+)	
Nitrogen oxides		+	Vallann	
Saturated halogenated		+	Yellow	
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
Benzyl bromide	by scale	1	11 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

High pressure gas cylinder method