

Performance

Measuring range	0.5 to 5 mg/m ³	
Number of pump strokes	5 (500 ml)	
Correction factor	1	
Sampling time	5 min	

 $\begin{array}{lll} \mbox{Detecting limit:} & \mbox{0.2 mg/m}^3 \ \ (\mbox{5 pump strokes}) \\ \mbox{Colour change:} & \mbox{Pale yellow} \rightarrow \mbox{Reddish purple} \\ \end{array}$

Corrections for temperature & humidity: Temperature correction is necessary.

Relative standard deviation: 10 % (for 0.5 to 2 mg/m³), 5 % (for 2 to 5 mg/m³)

Shelf life: 2 years

Reaction principle

H₂SO₄ + BaCl₂ → 2HCl HCl + Base → Chloride

Possible coexisting substances and their interferences

Substance	Concentration	Interference	Changes colour by itself to
Hydrogen chloride	≥ 0.05ppm	+	} Reddish purple
Chlorine	≥ 1.5ppm	+	
Sulphur dioxide		No	No
Nitrogen dioxide	≥ 4 ppm	+	} Reddish purple
Hydrogen fluoride	≥ 0.5 ppm	+	

Calibration gas generation

Bubbling method