

When used, these tubes are to be connected.

Performance

The minimum scale value (2.5ppm) is not printed on the tube, but only the scale line is printed.

Measuring range	0.5 to 2.5 ppm	(2.5) to 60 ppm
Number of pump strokes	2 to 5 (200 to 500 mL)	1(100 mL)
Correction factor	1/2 to 1/5	1
Sampling time	2 to 5 min	1 min

Detecting limit: 0.2 ppm (5 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 : 15 % (for 2.5 to 20 ppm), 10 % (for 20 to 60 ppm)

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

Shelf life: 12 months (in the refrigerator)

Reaction principle

CCl₄ + I₂O₅ + H₂S₂O₇ → COCl₂

 $\begin{array}{lll} \text{COCl}_2 + (\text{CH}_3)_2\text{NC}_6\text{H}_4\text{CHO} & \text{(CH}_3)_2\text{NC}_6\text{H}_4\text{CHCl}_2 + \text{CO}_2 \\ (\text{CH}_3)_2\text{NC}_6\text{H}_4\text{CHCl}_2 + (\text{C}_6\text{H}_5)_2\text{NH} & \text{Reaction product} \end{array}$

Possible coexisting substances and their interferences

Substance	Concentration	Interference	Changes colour by itself to
Bromine, Chlorine	≥ 50 ppm	+	
Hydrogen chloride	≥ 100 ppm	+	Yellow
Methyl bromide	≥ 100 ppm	+	
1,1,1-Trichloroethane	≥ 100 ppm	+	J
Chloroform		No	
Methylene chloride		No	
Tetrachloroethylene		No	No
Trichloroethane		No	
Vinyl chloride		No	J

Other substance measurable with this detector tube

Substance	Correction	No. of pump strokes	Measuring range
Chloropicrin	Factor : 1.0	1	2.5 to 60 ppm

Calibration gas generation

Diffusion tube method