

1. PERFORMANCE

- 1) Measuring range : 1-10 ppm 0.2-2.0 ppm
- Number of pump strokes : 1 (100mℓ) 4 (400mℓ)
- 2) Sampling time : 1.5 minutes/1 pump stroke
- 3) Detectable limit : 0.1 ppm (400mℓ)
- 4) Shelf life : 1 year (Necessary to store in refrigerated conditions ; 0 ~ 10 °C)
- 5) Operating temperature : 0 ~ 40 °C
- 6) Temperature compensation : Necessary (See "TEMPERATURE CORRECTION TABLE")
- 7) Reading : Direct reading from the scale calibrated by 1 pump stroke
- 8) Colour change : Pale orange → Blueish purple

2. RELATIVE STANDARD DEVIATION

RSD-low : 10 % RSD-mid. : 10 % RSD-high : 10 %

3. CHEMICAL REACTION

By reacting with an Oxidizer, Hydrogen chloride is produced and PH indicator is discoloured.
 $Cl_2C = CCl_2 + PbO_2 + H_2SO_4 \rightarrow HCl$

4. CALIBRATION OF THE TUBE

GAS CHROMATOGRAPHY

5. INTERFERENCE AND CROSS SENSITIVITY

Substance	Interference	ppm	Coexistence
Trichloroethylene FIG.1	Similar stain is produced.	2	Higher readings are given.
1,2-Dichloroethylene FIG.2	∕	2	∕
Hydrogen chloride	∕	2	∕
Vinyl chloride	∕	40	∕

(NOTE)

In case of 4 pump strokes, following formula is available for the actual concentration.

Actual concentration = $1/5 \times$ Temperature corrected value

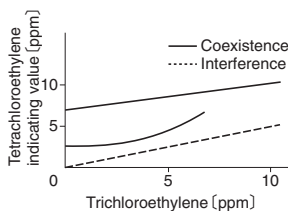


FIG.1 Influence of Trichloroethylene

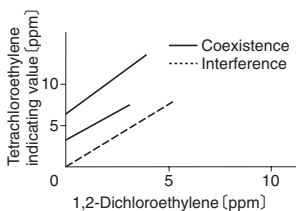


FIG.2 Influence of 1,2-Dichloroethylene

TEMPERATURE CORRECTION TABLE

Tube Readings (ppm)	Corrected Concentration (ppm)				
	0 °C (32 °F)	10 °C (50 °F)	20 °C (68 °F)	30 °C (86 °F)	40 °C (104 °F)
10	12.5	11.3	10.0	9.4	8.7
9	11.9	10.5	9.0	8.5	7.9
8	9.4	8.7	8.0	7.5	7.0
7	8.2	7.6	7.0	6.6	6.2
6	7.0	6.5	6.0	5.6	5.2
5	5.8	5.4	5.0	4.8	4.3
4	4.6	4.3	4.0	3.8	3.5
3	3.5	3.3	3.0	2.8	2.6
2	2.3	2.2	2.0	1.9	1.7
1	1.1	1.1	1.0	1.0	0.9