TETRACHLOROETHYLENE



1. PERFORMANCE

1) Measuring range : 10-300 ppm 5-150 ppm Number of pump strokes $1/2(50 \text{m} \ell)$ $1(100m\ell)$ 2) Sampling time 2 minutes/1 pump stroke

3) Detectable limit $1 \text{ ppm} (100 \text{m} \ell)$

4) Shelf life 2 years (Necessary to store in refrigerated conditions; $0 \sim 10 \, ^{\circ}\mathrm{C}$)

5) Operating temperature $0 \sim 40 \,^{\circ}\text{C}$

Necessary (See "TEMPERATURE CORRECTION TABLE") 6) Temperature compensation Direct reading from the scale calibrated by 1 pump stroke 7) Reading : Yellow → Red

8) Colour change

2. RELATIVE STANDARD DEVIATION

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

3. CHEMICAL REACTION

By decomposing with an Oxidizer, Hydrogen chloride is produced and PH indicator is discoloured. $CCI_2 = CCI_2 + PbO_2 + H_2SO_4 \rightarrow HCI$

4. CALIBRATION OF THE TUBE

GAS CHROMATOGRAPHY

5. INTERFERENCE AND CROSS SENSITIVITY

Substance		Interference	Coexistence
Vinyl chloride		Similar stain is produced.	Higher readings are given.
Hydrogen chloride	FIG.1	"	"
1,2-Dichloroethylene	FIG.2	"	"
Trichloroethylene		"	"
Chlorine		Pale red stain is produced.	"

(NOTE)

In case of 1/2 pump strokes, following formula is available for the actual concentration.

Actual concentration = $2 \times$ Temperature corrected value

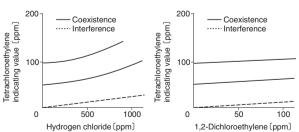


FIG.1 Influence of Hydrogen chloride FIG.2 Influence of 1,2-Dichloroethylene

TEMPERATURE CORRECTION TABLE

Tube	Corrected Concentration (ppm)					
Readings (ppm)	0 °C (32 °F)	10 °C (50 °F)	20 °C (68 °F)	30 °C (86 °F)	40 °C (104 °F)	
150	_	172	150	138	134	
100	144	116	100	92	88	
50	70	56	50	46	44	
30	40	36	30	28	26	
20	22	21	20	19	18	
10	10	10	10	10	10	