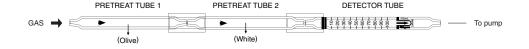
1,1,2-TRICHLOROETHANE



1. PERFORMANCE

1) Measuring range $\begin{array}{c} \text{10-100 ppm} \\ \text{Number of pump strokes} \end{array}$

2) Sampling time : 2 minutes/1 pump stroke

3) Detectable limit : 5 ppm

4) Shelf life : 1 year (Necessary to store in refrigerated conditions; $0 \sim 10^{\circ}$ C)

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

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

8) Colour change : White→Purple

2. RELATIVE STANDARD DEVIATION

RSD-low: 10% RSD-mid.: 10% RSD-high: 5%

3. CHEMICAL REACTION

Chlorine is produced by decomposing with an Oxidizer.

By reading between this Chlorine and 3, 3'-Dimethylnaphthidine, Nitroso-compound is produced.

 $CI_2CHCH_2CI + CrO_3 + H_2SO_4 \cdot nSO_3 \rightarrow CI_2$

CI₂ + 3, 3'-Dimethylnaphthidine → Nitroso-compound

4. CALIBRATION OF THE TUBE

DIFFUSION TUBE METHOD

5. INTERFERENCE AND CROSS SENSITIVITY

Substance	Interference	ppm	Coexistence	
Nitrogen oxides	Similar stain is produced.		Higher readings are given.	
Halogens	"		"	
Halogenated hydrocarbons	"		"	
Hexane	The accuracy of readings is not affected.	100	Lower readings are given.	

TEMPERATURE CORRECTION TABLE

Tube	Corrected Concentration (ppm)						
Readings (ppm)	0 °C (32 °F)	10 °C (50 °F)	20 °C (68 °F)	30 ℃ (86 °F)	40 ℃ (104 °F)		
100	81	89	100	114	129		
90	71	80	90	105	119		
80	60	71	80	96	109		
70	51	61	70	87	97		
60	43	52	60	76	85		
50	34	43	50	65	72		
40	26	34	40	54	59		
30	19	25	30	42	45		
20	13	15	20	29	31		
10	6	8	10	13	15		