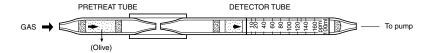
1,1-DICHLOROETHANE



1. PERFORMANCE

1) Measuring range : 10-160 ppm Number of pump strokes : $1(100 \text{m} \ell)$

2) Sampling time : 2 minutes/1 pump stroke

3) Detectable limit : 3 ppm

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

5) Operating temperature $0 \sim 40 \,^{\circ}$ C 6) Operating Humidity $20-90 \,^{\circ}$ R.H.%

7) Temperature compensation : Necessary (See "TEMPERATURE CORRECTION TABLE") 8) Reading : Direct reading from the scale calibrated by 1 pump stroke

9) Colour change : White→Purple

2. RELATIVE STANDARD DEVIATION

RSD-low: 15% RSD-mid.: 15% RSD-high: 10%

3. CHEMICAL REACTION

Chlorine is produced by decomposing with an Oxidizer.

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

 $CH_3CHCI_2 + CrO_3 + H_2SO_4 \rightarrow CI_2$

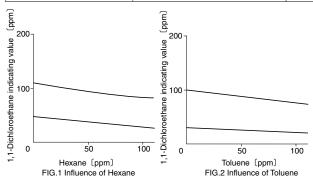
CI₂ + 3, 3'-Dimethylnaphthidine → Nitroso-compound

4. CALIBRATION OF THE TUBE

GAS CHROMATOGRAPHY

5. INTERFERENCE AND CROSS SENSITIVITY

Substance	Interference	ppm	Coexistence	
Nitrogen oxides	Similar stain is produced.		Higher readings are given.	
Halogens	"		"	
Halogenated hydrocarbons	3 //		"	
Alcohols	The accuracy of readings is not affected.	400	Lower readings are given.	
Hexane FIG.	//	20	"	
Toluene FIG.:	2 //	20	"	



TEMPERATURE CORRECTION TABLE

Scale	True Concentration (ppm)					
Readings (ppm)	0°C (32°F)	10℃ (50°F)	20°C (68° F)	30°C (86°F)	40 °C (104° F)	
160	205	180	160	130	105	
140	180	160	140	115	90	
120	150	135	120	100	80	
100	125	115	100	85	65	
80	100	90	80	65	55	
60	75	70	60	50	40	
40	50	45	40	35	30	
20	25	23	20	17	15	
10	10	10	10	10	10	