## METHYL IODIDE



## 1. PFRFORMANCE

1) Measuring range : 0.4-8 ppm 1-20 ppm 2.5-50 ppm Number of pump strokes 2(200mL) 1(100mL) 1/2(50mL)

2) Sampling time : 1.5 minutes/1 pump stroke

3) Detectable limit : 0.2 ppm(200mL)

4) Shelf life : 1 year (Necessary to store in refrigerated conditions;  $0\sim10^{\circ}$ C)

5) Operating temperature :  $0 \sim 40^{\circ}$ 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  $\rightarrow$  Gray

## 2. RELATIVE STANDARD DEVIATION

RSD-low: 15% RSD-mid.: 10% RSD-high: 5%

## 3. CHEMICAL REACTION

lodine pentoxide is reduced.  $CH_3I + V_2O_5 + H_2SO_4 \rightarrow I_2$ 

# 4. CALIBRATION OF THE TUBE DIFFUSION TUBE METHOD

#### 5. INTERFERENCE AND CROSS SENSITIVITY

Substance	Interference	ppm	Coexistence			
Carbon dioxide	The accuracy of readings is not affected.	50%	The accuracy of readings is not affected.			
Methyl bromide	//	1	, ,,			
Acetone	//	200	//			
Hexane	//	200	//			
Hydrogen sulphide		0.5	Higher readings are given.			
1,3-Dichloropropene		0.1	//			
Toluene			Lower readings are given.			

### (NOTE)

- 1) In case of 1/2 pump strokes, following formula is available for the actual concentration. Actual concentration  $= 2.5 \times$  Temperature corrected value
- 2) In case of 2 pump strokes, following formula is available for the actual concentration. Actual concentration  $= 0.4 \times$  Temperature corrected value

#### TEMPERATURE CORRECTION TABLE

Temperature; To correct for temperature, multiply the tube reading by the following factors.

Pump stroke	Temperature(°C)	0	5	10	15	20	25	30	35	40
1		1.55	1.32	1.15	1.00					
1/2	Coefficient	2.20	1.80	1.50	1.20	1.20 1.00				
2		1.30	1.22	1.15	1.00			1.15	1.22	1.30