Tube No.
176SC

METHYL IODIDE

1. PERFORMANCE

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
5) Operating temperature : 0～40℃
6) Temperature compensation : Necessary(See "TEMPERATURE CORRECTION TABLE")
7) Reading : Direct reading from the scale calibrated by 1 pump stroke
8) Colour change : White→Gray

2. RELATIVE STANDARD DEVIATION

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

3. CHEMICAL REACTION

Iodine 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×Temperature corrected value
2) In case of 2 pump strokes, following formula is available for the actual concentration.
   Actual concentration ＝0.4×Temperature corrected value

TEMPERATURE CORRECTION TABLE

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

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