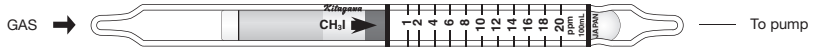
Tube No.
176SC

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 → Grey		

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