Tube No.
245UL

MITC (METHYL ISOTHIOCYANATE)

1. PERFORMANCE

1) Measuring range	: 0.3-10 ppm	0.66-22 ppm
Number of pump strokes	1 (100mℓ)	1/2 (50mℓ)
2) Sampling time	: 2 minutes / 1 pump stroke	
3) Detectable limit	: 0.1 ppm	
4) Shelf life	: 1 year (Necessary to store in refrigerated conditions ; 0 ~ 10℃)	
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	: Pink → Yellowish orange	

2. RELATIVE STANDARD DEVIATION

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

3. CHEMICAL REACTION

By decomposing with an oxidizer, Sulphur dioxide is produced and PH indicator is discoloured.

$CH_3NCS + V_2O_5 + H_2SO_4 \rightarrow SO_2$

SO_2 + pH indicator (Pink) → Yellowish orange

4. CALIBRATION OF THE TUBE

DIFFUSION TUBE METHOD

5. INTERFERENCE AND CROSS SENSITIVITY

Substance	Interference	%	Coexistence
Carbon dioxide		35	Higher readings are given.

(NOTE)

The scale is calibrated based on the temperature of 20℃. Reading obtained in other temperature circumstances should be corrected with the following temperature correction coefficient table.

TEMPERATURE CORRECTION COEFFICIENT TABLE (AT 20℃)

Pump stroke	Temperature (℃)	0	5	10	15	20	25	30	35	40
1	Coefficient	1.30	1.23	1.15	1.08	1.00	0.95	0.90	0.85	0.80
1/2		1.70	1.48	1.30	1.11	1.00	0.97	0.95	0.92	0.90

Actual concentration = Reading value × Coefficient for temperature correction