

1. PERFORMANCE

- 1) Measuring range : 0.2-20 % 0.1-10 %
Number of pump strokes : 1/2 (50mℓ) 1 (100mℓ)
- 2) Sampling time : 2 minutes/1 pump stroke
- 3) Detectable limit : 0.01 % (100mℓ)
- 4) Shelf life : 3 years
- 5) Operating temperature : 0 ~ 40 °C
- 6) Temperature compensation : Necessary (0 ~ 20 °C) (See "TEMPERATURE CORRECTION TABLE")
- 7) Reading : Direct reading from the scale calibrated by 1 pump stroke
- 8) Colour change : White → Dark brown

2. RELATIVE STANDARD DEVIATION

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

3. CHEMICAL REACTION

Iodine pentoxide is reduced
 $\text{CO} + \text{I}_2\text{O}_5 + \text{H}_2\text{SO}_4 \rightarrow \text{I}_2$

4. CALIBRATION OF THE TUBE

STANDARD GAS CYLINDER METHOD

5. INTERFERENCE AND CROSS SENSITIVITY

Substance	Interference	%	Coexistence
Acetylene	Similar stain is produced.	2	Higher reading are given.
Ethylene	"/	2	"/
Isobutane	Speckled stain is produced.	0.5	"/
Propane	"/		The accuracy of reading is not affected.
Hexane	Similar stain is produced.	0.4	The top of discoloured layer becomes unclear and higher readings are given.

(NOTE)

In case of 1/2 pump strokes, following formula is available for the actual concentration.

Actual concentration = 2 × Temperature corrected value

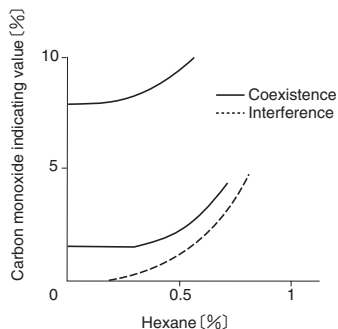


FIG.1 Influence of Hexane

TEMPERATURE CORRECTION TABLE

Tube Readings (%)	Corrected Concentration (%)				
	0 °C (32 °F)	5 °C (50 °F)	10 °C (68 °F)	20-40 °C (104 °F)	
10.0	4.0	5.6	8.0	10.0	
8.0	3.0	4.5	6.1	8.0	
6.0	2.3	3.2	4.3	6.0	
4.0	1.6	2.0	2.6	4.0	
2.0	1.0	1.2	1.5	2.0	
1.0	0.6	0.7	0.8	1.0	
0.5	0.4	0.5	0.5	0.5	