

## 1. PERFORMANCE

- |                             |  |           |           |
|-----------------------------|--|-----------|-----------|
| 1) Measuring range          | : 4-100 ppm  | 2-50 ppm  | 1-25 ppm  |
| Number of pump strokes      | 1 (100mℓ)  | 2 (200mℓ) | 4 (400mℓ) |
| 2) Sampling time            | : 4 minutes/2 pump strokes                                   |           |           |
| 3) Detectable limit         | : 0.2 ppm (400mℓ)  |           |           |
| 4) Shelf life               | : 2 years  |           |           |
| 5) Operating temperature    | : 0 ~ 40 °C  |           |           |
| 6) Temperature compensation | : Necessary (See "TEMPERATURE CORRECTION TABLE")             |           |           |
| 7) Reading                  | : Direct reading from the scale calibrated by 2 pump strokes |           |           |
| 8) Colour change            | : White → Greenish brown                                     |           |           |

## 2. RELATIVE STANDARD DEVIATION

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

## 3. CHEMICAL REACTION

Iodine pentoxide is reduced.



## 4. CALIBRATION OF THE TUBE

GAS CHROMATOGRAPHY

## 5. INTERFERENCE AND CROSS SENSITIVITY

Substance	Interference	ppm	Coexistence
Toluene    FIG.1	Yellowish brown stain is produced.		Higher readings are given.
Xylene    FIG.2	∕		∕
Carbon monoxide		50	Whole reagent is discoloured to Pale brown, the top of discoloured layer becomes unclear and higher readings are given.
Hexane		100	∕

(NOTE)

In case of 1 or 4 pump strokes, following formula is available for the actual concentration.

$$\text{Actual concentration} = \text{Temperature corrected value} \times \frac{2}{\text{Number of pump strokes}}$$

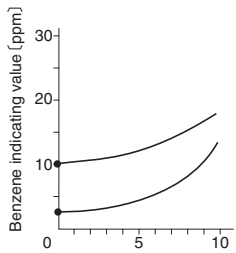


FIG.1 Influence of Toluene

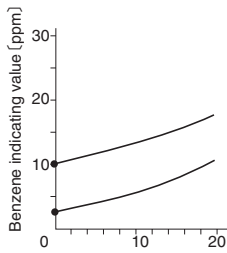


FIG.2 Influence of Xylene

TEMPERATURE CORRECTION TABLE

Tube Readings (ppm)	Corrected Concentration (ppm)				
	0 °C (32 °F)	10 °C (50 °F)	20 °C (68 °F)	30 °C (86 °F)	40 °C (104 °F)
50	38	44	50	—	—
40	30	35	40	45	50
30	23	26	30	34	38
20	15	16	20	23	25
10	8	9	10	11	13
5	4	5	5	6	6