

## 1. PERFORMANCE

- 1) Measuring range : 1-50 ppm
- Number of pump strokes : 1 (100mℓ)
- 2) Sampling time : 1.5 minutes/1 pump stroke
- 3) Detectable limit : 0.2 ppm
- 4) Shelf life : 1 year (Necessary to store in refrigerated conditions ; 0 ~ 10 °C)
- 5) Operating temperature : 0 ~ 40 °C
- 6) Temperature compensation : Necessary (See "TEMPERATURE CORRECTION TABLE")
- 7) Reading : Direct reading from the scale calibrated by 1 pump stroke
- 8) Colour change : White → Yellow

## 2. RELATIVE STANDARD DEVIATION

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

## 3. CHEMICAL REACTION

Bromine is produced by an Oxidizer. By reacting between this Bromine and *o*-Toluidine, Orthoquinone is produced  
 $\text{BrCH}_2\text{CH}_2\text{Br} + \text{I}_2\text{O}_5 + \text{CrO}_3 + \text{H}_2\text{SO}_4 \rightarrow \text{Br}_2$

## 4. CALIBRATION OF THE TUBE

GAS CHROMATOGRAPHY

## 5. INTERFERENCE AND CROSS SENSITIVITY

Substance	Interference	ppm	Coexistence
Halogens	Similar stain is produced.		Higher readings are given.
Halogenated hydrocarbons	∕		∕
Hexane FIG.1	The accuracy of readings is not affected.	200	Lower readings are given.

### TEMPERATURE CORRECTION TABLE

Tube Readings (ppm)	Corrected Concentration (ppm)					
	10 °C (50 F)	15 °C (59 F)	20 °C (68 F)	25 °C (77 F)	30 °C (86 F)	35 °C (95 F)
50	—	—	82	50	42	39
40	—	80	58	40	35	33
30	98	56	40	30	27	26
20	50	40	30	20	18	18
10	16	14	12	10	10	10
5	7	7	6	5	5	5
1	1	1	1	1	1	1

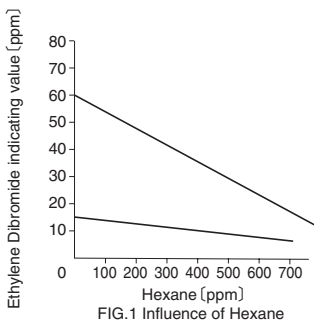


FIG.1 Influence of Hexane