

## 1. PERFORMANCE

- 1) Measuring range : 30-1,000 ppm    10-200 ppm  
     Number of pump strokes    2 (200mℓ)    4 (400mℓ)
- 2) Sampling time : 1.5 minutes/1 pump stroke
- 3) Detectable limit : 5 ppm (400mℓ)
- 4) Shelf life : 2 years (Necessary to store in refrigerated conditions ; 0 ~ 10 °C)
- 5) Operating temperature : 5 ~ 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 → Reddish orange

## 2. RELATIVE STANDARD DEVIATION

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

## 3. CHEMICAL REACTION

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

## 4. CALIBRATION OF THE TUBE

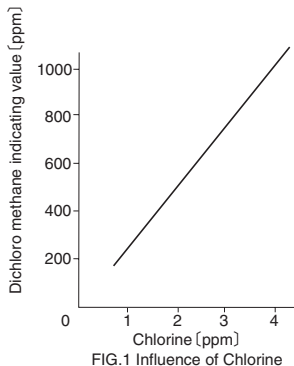
GAS CHROMATOGRAPHY

## 5. INTERFERENCE AND CROSS SENSITIVITY

Substance	Interference	Coexistence
Halogens or Halogenated hydrocarbons FIG.1	Similar stain is produced.	Higher readings are given.

(NOTE)

When the concentration is below 200 ppm, 4 pump strokes can be used to determine the lower concentration. Following formula is available for the actual concentration.  
 Actual concentration = 1/3 × Temperature corrected value.



TEMPERATURE CORRECTION TABLE

Tube Readings (ppm)	Corrected Concentration (ppm)							
	5 °C (41 °F)	10 °C (50 °F)	15 °C (59 °F)	20 °C (68 °F)	25 °C (77 °F)	30 °C (86 °F)	35 °C (95 °F)	40 °C (104 °F)
1000	—	—	1230	1000	820	670	550	450
800	—	1190	990	800	660	530	440	360
600	1120	900	740	600	500	400	330	270
400	720	600	500	400	330	260	220	180
200	360	300	250	200	165	135	110	90
100	170	145	120	100	80	65	50	45
30	50	45	35	30	25	20	15	10