CHLOROFORM



1. PERFORMANCE

1) Measuring range : 70-500 ppm 35-250 ppm 23-167 ppm Number of pump strokes $2(200 \text{m}\ell)$ 3(300m ℓ) 4(400m ℓ)

2) Sampling time : 3 minutes/2 pump strokes

3) Detectable limit : 20 ppm $(400 \text{m} \ell)$

4) Shelf life : 2 years (Necessary to store in refrigerated conditions; $0 \sim 10^{\circ}$ C)

5) Operating temperature : $10 \sim 40 \,^{\circ}\text{C}$

6) Temperature compensation : Necessary (See "TEMPERATURE CORRECTION TABLE") 7) Reading : Direct reading from the scale calibrated by 2 pump strokes

8) Colour change : White→Yellowish orange

2. RELATIVE STANDARD DEVIATION

RSD-low: 20% RSD-mid.: 15% RSD-high: 15%

3. CHEMICAL REACTION

Chlorine is produced by an Oxidizer. By reacting between this Chlorine and o-Toluidine, yellow holoquinone is produced.

 $CHCl_3 + I_2O_5 + CrO_3 + H_2SO_4 \cdot nSO_3 \rightarrow Cl_2$

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		"		"	
n-Hexane	FIG.2	The accuracy of readings is not affected.	200	Lower readings are given.	

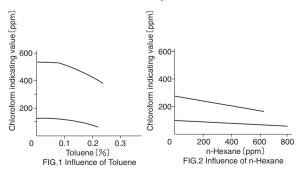
(NOTE)

In case of 3 pump strokes, following formula is available for the actual concentration.

Actual concentration = $1/2 \times$ Temperature corrected value

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

Actual concentration = $1/3 \times$ Temperature corrected value



TEMPERATURE CORRECTION TABLE

Corrected Concentration (ppm)							
10 °C (50 °F)	15 ℃ (59 °F)	20 °C (68 °F)	30 ℃ (95 °F)	40 °C (95 °F)			
_	_	500	335	260			
_	520	400	280	215			
590	390	300	215	165			
380	260	200	145	115			
180	130	100	80	65			
120	85	70	60	50			
	10°C (50°F) — — 590 380 180	10°C (59°F) (59°F) — — 520 590 390 380 260 180 130	10 °C 15 °C 20 °C (50 °F) (68 °F) - 500 - 520 400 - 590 380 260 200 180 130 100	10°C 15°C 20°C 30°C (50°F) (68°F) (68°F) 30°C — — 500 335 — 520 400 280 590 390 300 215 380 260 200 145 180 130 100 80			