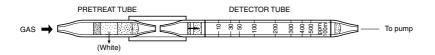
# 1,3-DICHLOROPROPANE



## 1. PERFORMANCE

1) Measuring range 10-500 ppmNumber of pump strokes  $1(100\text{m}\ell)$ 

2) Sampling time : 1.5 minutes/1 pump stroke

3) Detectable limit : 1 ppn

4) Shelf life : 1 year (Necessary to store in a refrigerated place :  $0 \sim 10^{\circ}$ C)

5) Operating temperature :  $0 \sim 40 \,^{\circ}\text{C}$ 

6) Temperature compensation : Necessary (See "TEMPERATURE CORRECTION TABLE") 7) Reading : Direct reading from the scale calibrated by 1 pump stroke

8) Colour change : White→Orange

## 2. RELATIVE STANDARD DEVIATION

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

# 3. CHEMICAL REACTION

By decomposing with an Oxidizer, chlorine is produced. Yellowish Orthoquinone is produced by reacting between this Chlorine and o-Toulidine.

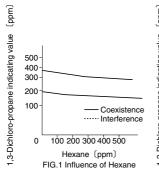
$$\begin{array}{c} CH_2CICH_2CH_2CI + I_2O_4 + CrO_3 + H_2SO_4 {\longrightarrow} CI_2 \\ H_2N - \bigcirc - \bigcirc - NH_2 + CI_2 {\longrightarrow} CINH_2 = \bigcirc = \bigcirc = NH_2CI \\ CH_3 \qquad CH_3 \qquad CH_3 \qquad CH_3 \qquad CH_3 \end{array}$$

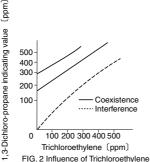
## 4. CALIBRATION OF THE TUBE

GAS CHROMATOGRAPHY

## 5. INTERFERENCE AND CROSS SENSITIVITY

OF INVIENT ENTEROE 7 IND OTTOOG OFFICIALITY						
Substance	Interference	Coexistence				
Alcohols	The accuracy of readings is not affected.	The accuracy of readings is not affected.				
Esters	"	"				
Aromatic hydrocarbons	"	"				
Aliphatic hydrocarbons FIG.1	"	"				
Halogenated hydrocarbons FIG.2	Similar stain is produced.	Higher readings are given.				





#### TEMPERATURE CORRECTION TABLE

Scale	True Concentration (ppm)					
Readings (ppm)	0°C (32°F)	10 °C (50 °F)	20°C (68°F)	30°C (86°F)	40 ℃ (104 °F)	
500	_	685	500	415	350	
400	_	550	400	330	275	
300	_	400	300	240	200	
200	380	265	200	165	130	
100	175	130	100	75	60	
50	90	70	50	40	37	
30	55	40	30	20	15	
10	20	14	10	7	5	