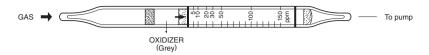
# **TRICHLOROETHYLENE**



#### 1. PERFORMANCE

1) Measuring range 10-300 ppm Sumber of pump strokes  $1/2(50m\ell)$   $1(100m\ell)$  2) Sampling time  $1/2(50m\ell)$  2 minutes/1 pump stroke

3) Detectable limit : 1 ppm  $(100 \text{m} \ell)$ 

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

: Yellow → Red

8) Colour change

# 2. RELATIVE STANDARD DEVIATION

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

## 3. CHEMICAL REACTION

By decomposing with an Oxidizer, Hydrogen chloride is produced and PH indicator is discoloured.  $CI_2C = CHCI + PbO_2 + H_2SO_4 \rightarrow HCI$ 

## 4. CALIBRATION OF THE TUBE

GAS CHROMATOGRAPHY

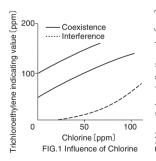
#### 5. INTERFERENCE AND CROSS SENSITIVITY

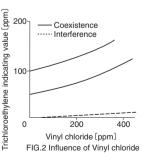
Substance		Interference	Coexistence	
Vinyl chloride	FIG.2	Similar stain is produced.	Higher readings are given.	
Hydrogen chloride		"	"	
1,2-Dichloroethylene		"	"	
Tetrachloroethylene		"	"	
Chlorine	FIG.1	Pale red stain is produced.		

## (NOTE)

In case of 1/2 pump strokes, following formula is available for the actual concentration.

Actual concentration =  $2 \times$  Temperature corrected value





#### TEMPERATURE CORRECTION TABLE

Tube	Corrected Concentration (ppm)						
Readings (ppm)	0 °C (32 °F)	10 °C (50 °F)	20 °C (68 °F)	30 ℃ (86 °F)	40 °C (104 °F)		
	(32 17)						
150	_	162	150	144	142		
100	120	108	100	96	94		
50	58	53	50	48	46		
30	34	32	30	29	28		
20	20	20	20	20	20		