

Tube No.  
135SM

# TETRACHLOROETHYLENE



## 1. PERFORMANCE

- 1) Measuring range : 50-500ppm      125-1,250ppm  
     Number of pump strokes    1(100mL)      1/2(50mL)
- 2) Sampling time : 45 seconds/1 pump stroke
- 3) Detectable limit : 5 ppm(100mL)
- 4) Shelf life : 1 year
- 5) Operating temperature : 5~40°C
- 6) Temperature compensation : Necessary (See "TEMPERATURE CORRECTION TABLE")
- 7) Reading : Direct reading from the scale calibrated by 1 pump stroke
- 8) Colour change : Yellow → Red

## 2. RELATIVE STANDARD DEVIATION

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

## 3. CHEMICAL REACTION

Iodine pentoxide is reduced.  
 $\text{Cl}_2\text{C} = \text{CCl}_2 + \text{PbO}_2 + \text{H}_2\text{SO}_4 \rightarrow \text{HCl}$

## 4. CALIBRATION OF THE TUBE

DIFFUSION TUBE METHOD

## 5. INTERFERENCE AND CROSS SENSITIVITY

Substance	Interference	ppm	Coexistence
Trichloroethylene	Similar stain is produced.	10	Higher readings are given.
1,2-Dichloroethylene	"	10	"
1,1,1-Trichloroethane		less than 300	The accuracy of reading is not affected.

### (NOTE)

In case of 1/2 pump strokes, following formula is available for actual concentration.  
 Actual concentration = 2.5 × Reading value.

### TEMPERATURE CORRECTION TABLE

Temperature : To correct for temperature, multiply the tube reading by the following factors.

Temperature (°C)	1	2	3	4	5	6	7	8	9	10
Correction Factor	-	-	-	-	1.40	1.36	1.32	1.28	1.24	1.20
Temperature (°C)	11	12	13	14	15	16	17	18	19	20
Correction Factor	1.18	1.16	1.14	1.12	1.10	1.08	1.06	1.04	1.02	1.00
Temperature (°C)	21	22	23	24	25	26	27	28	29	30
Correction Factor	0.99	0.98	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.90
Temperature (°C)	31	32	33	34	35	36	37	38	39	40
Correction Factor	0.89	0.88	0.87	0.86	0.85	0.84	0.83	0.82	0.81	0.80