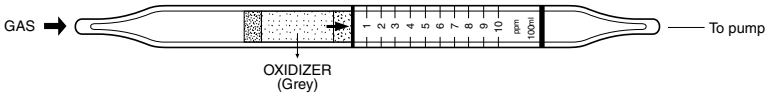
Tube No.
135SB TETRACHLOROETHYLENE



1. PERFORMANCE

1) Measuring range	: 1-10 ppm	0.2-2.0 ppm
Number of pump strokes	1(100mℓ)	4(400mℓ)
2) Sampling time	: 1.5 minutes/1 pump stroke	
3) Detectable limit	: 0.1 ppm(400mℓ)	
4) Shelf life	: 1 year(Necessary to store in a refrigerated place ; 0 ~ 10℃)	
5) Operating temperature	: 0 ~ 40℃	
6) Temperature compensation	: Necessary(See "TEMPERATURE CORRECTION TABLE")	
7) Reading	: Direct reading from the scale calibrated by 1 pump stroke	
8) Colour change	: Pale orange → Blueish purple	

2. RELATIVE STANDARD DEVIATION

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

3. CHEMICAL REACTION

By reacting with an Oxidizer, Hydrogen chloride is produced and PH indicator is discoloured.

$CI_2C = CCI_2 + PbO_2 + H_2SO_4 \rightarrow HCI$

4. CALIBRATION OF THE TUBE

GAS CHROMATOGRAPHY

5. INTERFERENCE AND CROSS SENSITIVITY

Substance	Interference	ppm	Coexistence
Trichloroethylene FIG.1	Similar stain is produced.	2	Higher readings are given.
1,2-Dichloroethylene FIG.2	〃	2	〃
Hydrogen chloride	〃	2	〃
Vinyl chloride	〃	40	〃

(NOTE)

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

Actual concentration = 1/5 × Temperature corrected value

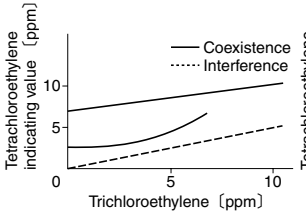


FIG.1 Influence of Trichloroethylene

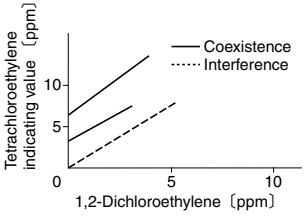


FIG.2 Influence of 1,2-Dichloroethylene

TEMPERATURE CORRECTION TABLE

Scale Readings (ppm)	True Concentration (ppm)				
	0℃ (32°F)	10℃ (50°F)	20℃ (68°F)	30℃ (86°F)	40℃ (104°F)
10	12.5	11.3	10.0	9.4	8.7
9	11.9	10.5	9.0	8.5	7.9
8	9.4	8.7	8.0	7.5	7.0
7	8.2	7.6	7.0	6.6	6.2
6	7.0	6.5	6.0	5.6	5.2
5	5.8	5.4	5.0	4.8	4.3
4	4.6	4.3	4.0	3.8	3.5
3	3.5	3.3	3.0	2.8	2.6
2	2.3	2.2	2.0	1.9	1.7
1	1.1	1.1	1.0	1.0	0.9