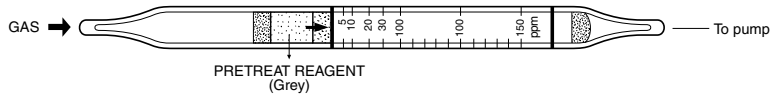
Tube No.
135SA

TETRACHLOROETHYLENE



1. PERFORMANCE

1) Measuring range : 10-300 ppm 5-150 ppm
Number of pump strokes 1/2(50mℓ) 1(100mℓ)
2) Sampling time : 2 minutes/1 pump stroke
3) Detectable limit : 1 ppm(100mℓ)
4) Shelf life : 2 years(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 : Yellow→Red

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.

$CCl_2 = CCl_2 + PbO_2 + H_2SO_4 \rightarrow HCl$

4. CALIBRATION OF THE TUBE

GAS CHROMATOGRAPHY

5. INTERFERENCE AND CROSS SENSITIVITY

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

(NOTE)

In case of 1/2 or 2 pump strokes, following formula is available for the actual concentration.
Actual concentration = 2 × Temperature corrected value

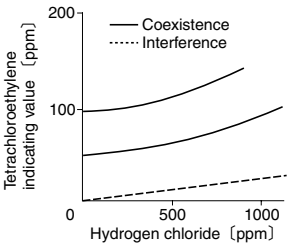


FIG.1 Influence of Hydrogen chloride

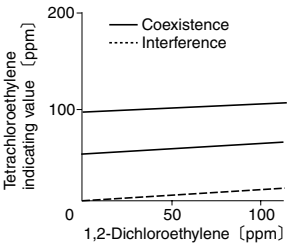


FIG.2 Influence of 1,2-Dichloroethylene

TEMPERATURE CORRECTION TABLE

Scale Readings (ppm)	True Concentration (ppm)				
	0℃ (32°F)	10℃ (50°F)	20℃ (68°F)	30℃ (86°F)	40℃ (104°F)
150	—	172	150	138	134
100	144	116	100	92	88
50	70	56	50	46	44
30	40	36	30	28	26
20	22	21	20	19	18
10	10	10	10	10	10