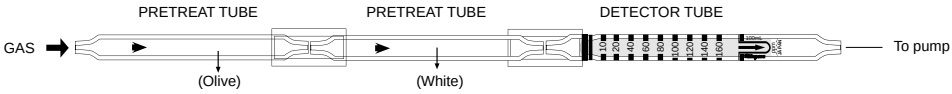
Tube No.
235SA

1,1-DICHLOROETHANE



1. PERFORMANCE

1) Measuring range : 10-160 ppm
   Number of pump strokes 1(100mℓ)
2) Sampling time : 2 minutes/1 pump stroke
3) Detectable limit : 3 ppm
4) Shelf life : 1 year (Necessary to store in a refrigerated place ; 0 ~ 10℃)
5) Operating temperature : 0 ~ 40℃
6) Operating Humidity : 20-80 R.H.%
7) Temperature compensation : Necessary (See "TEMPERATURE CORRECTION TABLE")
8) Reading : Direct reading from the scale calibrated by 1 pump stroke
9) Colour change : White → Purple

2. RELATIVE STANDARD DEVIATION

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

3. CHEMICAL REACTION

Chlorine is produced by decomposing with an Oxidizer.
By reacting between this Chlorine and 3, 3'-Dimethylnaphthidine, Nitroso-compound is produced.

$CH_3CHCl_2 + CrO_3 + H_2S_2O_7 \rightarrow Cl_2$

Cl_2 + 3, 3'-Dimethylnaphthidine → Nitroso-compound

4. CALIBRATION OF THE TUBE

DIFFUSION TUBE METHOD

5. INTERFERENCE AND CROSS SENSITIVITY

Substance	Interference	ppm	Coexistence
Nitrogen oxides	Similar stain is produced.		Higher readings are given.
Halogens	〃		〃
Halogenated hydrocarbons	〃		〃
Alcohols	The accuracy of readings is not affected.	400	Lower readings are given.
Hexane	〃	20	〃
Toluene	〃	20	〃

TEMPERATURE CORRECTION TABLE

Scale Readings (ppm)	True Concentration (ppm)				
	0℃ (32°F)	10℃ (50°F)	20℃ (68°F)	30℃ (86°F)	40℃ (104°F)
160	230	195	160	118	75
140	200	170	140	105	70
120	170	145	120	90	60
100	140	120	100	75	50
80	110	95	80	60	40
60	80	70	60	48	35
40	50	45	40	33	25
20	25	23	20	18	15
10	10	10	10	10	10