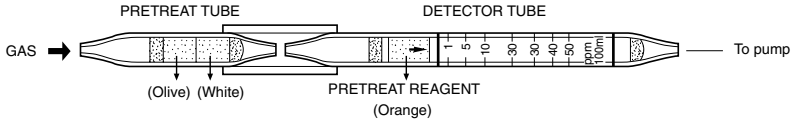
Tube No.
166S

ETHYLENE DIBROMIDE



1. PERFORMANCE

1) Measuring range : 1-50 ppm
   Number of pump strokes : 1 (100mℓ)
2) Sampling time : 1.5 minutes/1 pump stroke
3) Detectable limit : 0.2 ppm
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 : White → Yellow

2. RELATIVE STANDARD DEVIATION

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

3. CHEMICAL REACTION

Bromine is produced by an Oxidizer. By reacting between this Bromine and *o*-Toluidine, Orthoquinone is produced

$$BrCH_2CH_2Br + I_2O_4 + CrO_3 + H_2SO_4 \rightarrow Br_2$$

4. CALIBRATION OF THE TUBE

GAS CHROMATOGRAPHY

5. INTERFERENCE AND CROSS SENSITIVITY

Substance	Interference	ppm	Coexistence
Halogens	Similar stain is produced.		Higher readings are given.
Halogenated hydrocarbons	〃		〃
Hexane FIG.1	The accuracy of readings is not affected.	200	Lower readings are given.

TEMPERATURE CORRECTION TABLE

Scale Readings (ppm)	True Concentration (ppm)					
	10℃ (50°F)	15℃ (59°F)	20℃ (68°F)	25℃ (77°F)	30℃ (80°F)	35℃ (95°F)
50	—	—	82	50	42	39
40	—	80	58	40	35	33
30	98	56	40	30	27	26
20	50	40	30	20	18	18
10	16	14	12	10	10	10
5	7	7	6	5	5	5
1	1	1	1	1	1	1

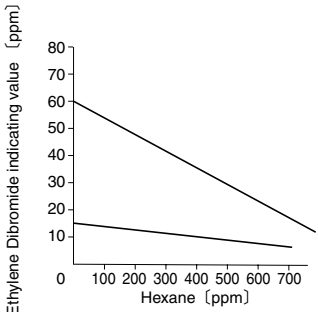


FIG.1 Influence of Hexane