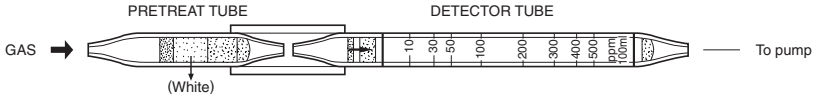
Tube No.
194S

1,3-DICHLOROPROPANE



1. PERFORMANCE

1) Measuring range : 10-500 ppm
   Number of pump strokes 1(100mℓ)
2) Sampling time : 1.5 minutes/1 pump stroke
3) Detectable limit : 1 ppm
4) Shelf life : 1 year(Necessary to store in refrigerated conditions ; 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→Orange

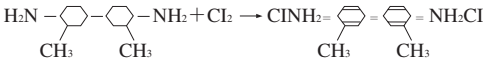
2. RELATIVE STANDARD DEVIATION

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

3. CHEMICAL REACTION

By decomposing with an Oxidizer, chlorine is produced. Yellowish Orthoquinone is produced by reacting between this Chlorine and *o*-Toulidine.

$$CH_2ClCH_2CH_2Cl + I_2O_5 + CrO_3 + H_2SO_4 \cdot nSO_3 \rightarrow Cl_2$$



4. CALIBRATION OF THE TUBE

GAS CHROMATOGRAPHY

5. INTERFERENCE AND CROSS SENSITIVITY

Substance	Interference	Coexistence
Alcohols	The accuracy of readings is not affected.	The accuracy of readings is not affected.
Esters	〃	〃
Aromatic hydrocarbons	〃	〃
Aliphatic hydrocarbons FIG.1	〃	〃
Halogenated hydrocarbons FIG.2	Similar stain is produced.	Higher readings are given.

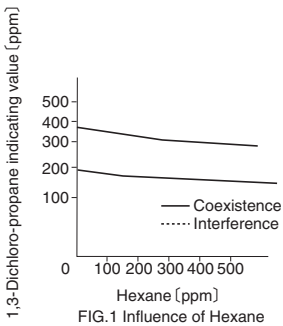


FIG.1 Influence of Hexane

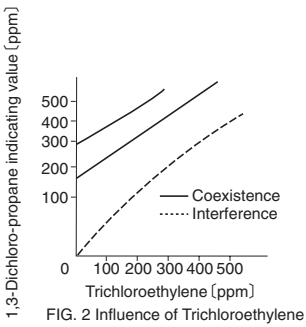


FIG. 2 Influence of Trichloroethylene

TEMPERATURE CORRECTION TABLE

Tube Readings (ppm)	Corrected Concentration (ppm)				
	0℃ (32°F)	10℃ (50°F)	20℃ (68°F)	30℃ (86°F)	40℃ (104°F)
500	—	690	500	420	350
400	—	550	400	330	280
300	—	400	300	240	200
200	380	270	200	170	130
100	180	130	100	80	60
50	90	70	50	40	30
30	60	40	30	20	15
10	20	14	10	7	5