ETHYL BENZENE



1. PERFORMANCE

1) Measuring range 10-500 ppmNumber of pump strokes $1(100\text{m}\ell)$

2) Sampling time : 2 minutes/1 pump stroke

3) Detectable limit : 3 ppm4) Shelf life : 1.5 years5) Operating temperature $: 0 \sim 40 \,^{\circ}\text{C}$

6) Temperature compensation : Necessary (0 \sim 20 °C) (See "TEMPERATURE CORRECTION TABLE")

7) Reading : Direct reading from the scale calibrated by 1 pump stroke

8) Colour change : White→Brown

2. RELATIVE STANDARD DEVIATION

RSD-low: 10% RSD-mid.: 10% RSD-high: 5%

3. CHEMICAL REACTION

Iodine pentoxide is reduced.

 $C_6H_5C_2H_5 + I_2O_5 + H_2SO_4 \rightarrow I_2$

4. CALIBRATION OF THE TUBE

GAS CHROMATOGRAPHY

5. INTERFERENCE AND CROSS SENSITIVITY

Substance	Interference	ppm Coexistence		
Benzene	Similar stain is produced.	Higher readings are given.		
Toluene	"		"	
Xylene	"		"	
Methanol	The accuracy of readings is not affected.	1%	"	
Hexane	Pale brown stain is produced.	0.1%	The maximum end point of the stain is indiscernable and higher readings are given.	

TEMPERATURE CORRECTION TABLE

Tube	Corrected Concentration (ppm)					
Readings (ppm)	0°C (32°F)	5℃ (50°F)	10 °C (68 °F)	20 °C (86 °F)		
500	_	_	600	500		
400	590	520	465	400		
300	390	360	330	300		
200	240	225	215	200		
100	120	112	105	100		