TOLUENE



1. PERFORMANCE

1) Measuring range 100-3000 ppmNumber of pump strokes $1(100\text{m}\ell)$

2) Sampling time : 1.5 minutes/1 pump stroke

3) Detectable limit : 10 ppm4) Shelf life : 2 years5) Operating temperature $: 0 \sim 40 \,^{\circ}\text{C}$

6) Temperature compensation : Necessary (See "TEMPERATURE CORRECTION TABLE") 7) Reading : Direct reading from the scale calibrated by 1 pump stroke

8) Colour change : White → Dark brown

2. RELATIVE STANDARD DEVIATION

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

3. CHEMICAL REACTION

Iodine pentoxide is reduced. $C_6H_5CH_3 + I_2O_5 + H_2SO_4 \rightarrow I_2$

4. CALIBRATION OF THE TUBE

GAS CHROMATOGRAPHY

5. INTERFERENCE AND CROSS SENSITIVITY

Substance	Interference	ppm	Coexistence	
Benzene	Dark green stain is produced.		Higher readings are given.	
Ethyl benzene	Similar stain is produced.		"	
Xylene	"		"	
Hexane	Whole reagents is changed to Pale brown.		"	
Methanol	The accuracy of readings is not affected.	1%	"	

TEMPERATURE CORRECTION TABLE

Tube	Corrected Concentration (ppm)					
Readings (ppm)	0°C (32°F)	10 ℃ (50 °F)	20 °C (68 °F)	30 °C (86 °F)	40 ℃ (104 °F)	
3000	4000	3500	3000	2800	2600	
2500	3300	2900	2500	2300	2200	
2000	2700	2300	2000	1900	1800	
1500	2000	1700	1500	1400	1300	
1000	1300	1100	1000	970	940	
500	500	500	500	500	500	
300	300	300	300	300	300	
100	100	100	100	100	100	