Tube No.
113SA n-HEXANE

1. PERFORMANCE

1) Measuring range : 0.11-1.32 % 0.05-0.6 %
Number of pump strokes 1/2 (50mℓ) 1 (100mℓ)
2) Sampling time : 1 minute/1 pump stroke
3) Detectable limit : 0.005 % (50 ppm) (100mℓ)
4) Shelf life : 3 years
5) Operating temperature : 10 ~ 40 ℃
6) Temperature compensation : Necessary (See "TEMPERATURE CORRECTION TABLE")
7) Reading : Direct reading from the scale calibrated by 1 pump stroke
8) Colour change : Orange → Dark green

2. RELATIVE STANDARD DEVIATION

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

3. CHEMICAL REACTION

Chromium oxide is reduced.

$CH_3(CH_2)_4CH_3 + Cr^{6+} + H_2SO_4 \rightarrow Cr^{3+}$

4. CALIBRATION OF THE TUBE

GAS CHROMATOGRAPHY

5. INTERFERENCE AND CROSS SENSITIVITY

Substance	Interference	ppm	Coexistence
Aliphatic hydrocarbons (more than C_3)	Similar stain is produced.		Higher readings are given.
Acetylene	〃		〃
Ethylene	〃		〃
Cyclohexane	〃		〃
Benzene FIG.1	〃	400	〃
Toluene FIG.2	〃	800	〃
Xylene	〃	2,000	〃

In presence of Alcohols, Ketones or Esters less than 6 %, the accuracy of readings is not affected.

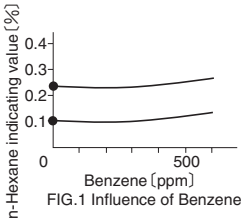

FIG.1 Influence of Benzene

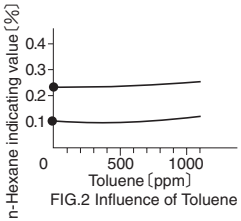

FIG.2 Influence of Toluene

TEMPERATURE CORRECTION TABLE

Tube Readings (%)	Corrected Concentration (%)				
	10 ℃ (50 ℉)	15 ℃ (59 ℉)	20 ℃ (68 ℉)	30 ℃ (86 ℉)	40 ℃ (104 ℉)
0.6	0.73	0.65	0.60	0.52	0.48
0.5	0.60	0.55	0.50	0.45	0.42
0.4	0.48	0.44	0.40	0.37	0.35
0.3	0.35	0.32	0.30	0.28	0.27
0.2	0.22	0.21	0.20	0.19	0.18
0.1	0.10	0.10	0.10	0.10	0.10

(NOTE)

In case of 1/2 pump strokes, following formula is available for the actual concentration.
Actual concentration = 2.2 × Tmperature corrected value