# n-HEXANE



## 1. PERFORMANCE

1) Measuring range 50-1,400 ppm Number of pump strokes  $1(100 \text{m} \ell)$ 

2) Sampling time : 1.5 minutes/1 pump stroke

3) Detectable limit : 5 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 : Orange → Yellowish green

## 2. RELATIVE STANDARD DEVIATION

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

# 3. CHEMICAL REACTION

Chromium oxide is reduced.

CH<sub>3</sub> (CH<sub>2</sub>)<sub>4</sub>CH<sub>3</sub> + Cr<sup>6+</sup> + H<sub>2</sub>SO<sub>4</sub> · nSO<sub>3</sub>  $\rightarrow$  Cr<sup>3+</sup>

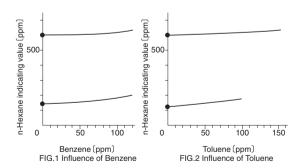
#### 4. CALIBRATION OF THE TUBE

GAS CHROMATOGRAPHY

# 5. INTERFERENCE AND CROSS SENSITIVITY

Substance		Interference	Coexistence			
Aromatic hydrocarbons FIG	G.1,2	Black stain is produced.	Higher readings are given.			
Aliphatic hydrocarbons (more than C <sub>3</sub> )		Similar stain is produced.	"			

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



### TEMPERATURE CORRECTION TABLE

Tube	Corrected Concentration (ppm)						
Readings (ppm)	0°C (32°F)	10 °C (50 °F)	20 °C (68 °F)	30 °C (86 °F)	40 °C (104 °F)		
1400	1630	1530	1400	1270	1180		
1200	1400	1320	1200	1090	1010		
1000	1170	1100	1000	910	840		
800	930	870	800	720	670		
600	700	660	600	550	500		
400	460	430	400	360	330		
200	220	210	200	180	170		
100	100	100	100	100	100		