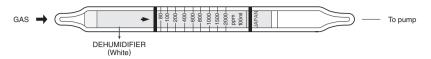
ACETONE



1. PERFORMANCE

1) Measuring range : 125-5,000 ppm 50-2,000 ppm 20-800 ppm Number of pump strokes $1/2(50m\ell)$ $1(100m\ell)$ $2(200m\ell)$

2) Sampling time : 1.5 minutes/1 pump stroke

3) Detectable limit $10 \text{ ppm} (200 \text{m} \ell)$ 4) Shelf life 2 years5) Operating temperature $0 \sim 40 \text{ C}$

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

8) Colour change : Yellow → Dark brown

2. RELATIVE STANDARD DEVIATION

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

3. CHEMICAL REACTION

Chromium oxide is reduced. $CH_3COCH_3 + Cr^{6+} + H_2SO_4 \rightarrow Cr^{3+}$

4. CALIBRATION OF THE TUBE

GAS CHROMATOGRAPHY

5. INTERFERENCE AND CROSS SENSITIVITY

Substance	Interference	Coexistence	
Alcohols	Brown stain is produced.	Higher readings are given.	
Other Ketones	"	"	
Esters	"	"	
Aromatic hydrocarbons	"	"	
Aliphatic hydrocarbons (more than C ₃)	Whole layer is discoloured to Brown.	If the top of discoloured layer is possible to read, the accuracy of readings is not affected.	
Halogenated hydrocarbons	"	"	

(NOTE)

In case of 1/2 or 2 pump strokes, following formula is available for the actual concentration.

1/2 pump strokes : Actual concentration = $2.5 \times$ Temperature corrected value 2 pump strokes : Actual concentration = $0.4 \times$ Temperature corrected value

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 ℃ (104 °F)
2,000	3,500	2,800	2,000	1,600	1,300
1,500	2,570	2,000	1,500	1,250	1,000
1,000	1,670	1,250	1,000	850	700
800	1,300	1,000	800	700	600
600	1,000	800	600	550	450
400	650	500	400	350	300
200	300	200	200	200	200
100	200	100	100	100	100
50	100	50	50	50	50