ACETONE



1. PERFORMANCE

1) Measuring range : 1.0-5.0 % 0.1-2.0% Number of pump strokes $1/2(50m\ell)$ 1(100ml) 2) Sampling time 1.5 minute/1 pump stroke 3) Detectable limit $0.02\%(200\text{ ppm})(100\text{m}\ell)$

4) Shelf life

3 years 0~40℃

5) Operating temperature

6) Temperature compensation : Necessary (See "TEMPERATURE CORRECTION TABLE")

7) Reading

Direct reading from the scale calibrated by 1 pump stroke

8) Colour change Orange → 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

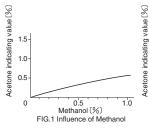
GAS CHROMATOGRAPHY

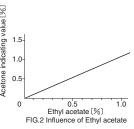
5. INTERFERENCE AND CROSS SENSITIVITY

Substance		Interference		Coexistence	
Alcohols	FIG.1	Similar stain is produced.		Higher readings are given.	
Other ketones		"		"	
Aromatic hydrocarbons		"		"	
Esters	FIG.2	"		"	
Halogenated hydrocarbons		Whole reagent is slightly discoloured to pale brown.	0.5%	"	

^{*}Methanol is indicated with half the sensitivity and Ethyl acetate has the same sensitivity with Acetone.

- 1) If the discolouration is over the scale, replace the tube with new one and pull the handle at half stroke (to 50m l line). And read a figure from the scale on the tube.
- 2) Correct the reading value with the TEMPERATURE CORRECTION TABLE first, and convert the value into an actual concentration by using the conversion scale shown in the instruction sheet.





TEMPERATURE CORRECTION TABLE

Tube	Corrected Concentration (%)							
Readings (%)	0 °C (32 °F)	10 °C (50 °F)	20 °C (68 °F)	30 °C (86 °F)	40 ℃ (104 °F)			
2.0	_	2.38	2.00	1.78	1.60			
1.5	2.20	1.76	1.50	1.30	1.16			
1.0	1.44	1.18	1.00	0.86	0.76			
0.5	0.72	0.60	0.50	0.42	0.36			
0.2	0.30	0.25	0.20	0.16	0.14			
0.1	0.16	0.12	0.10	0.08	0.08			

