ETHYL ETHER



1. PERFORMANCE

1) Measuring range 0.04-1.4 % Number of pump strokes $1 (100 \text{m} \ell)$

2) Sampling time : 1.5 minutes/1 pump stroke

: 3 years

3) Detectable limit : 0.001 % (10 ppm)

4) Shelf life

5) 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 → Dark green

2. RELATIVE STANDARD DEVIATION

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

3. CHEMICAL REACTION

Chromium oxide is reduced.

 $(C_2H_5)_2O + Cr^{6+} + H_2SO_4 \rightarrow Cr^{3+}$

4. CALIBRATION OF THE TUBE

GAS CHROMATOGRAPHY

5. INTERFERENCE AND CROSS SENSITIVITY

Substance	Interference	ppm	Coexistence				
Acetylene		3%	Whole reagent is changed to Brown.				
Propane		0.2%	"				
Other organic gases and va- pours except Halogenated hydrocarbons	Similar stain is produced.	50	Higher readings are given.				

TEMPERATURE CORRECTION TABLE

Tube	Corrected Concentration (%)					
Readings (%)	0°C (32°F)	10 °C (50 °F)	20 °C (68 °F)	30 °C (86 °F)	40 °C (104 °F)	
1.4	1.8	1.6	1.4	1.3	1.1	
1.2	1.5	1.4	1.2	1.1	0.9	
1.0	1.2	1.1	1.0	0.9	0.8	
0.8	0.9	0.9	0.8	0.7	0.6	
0.6	0.6	0.6	0.6	0.6	0.5	
0.5	0.5	0.5	0.5	0.5	0.4	
0.4	0.4	0.4	0.4	0.4	0.3	
0.3	0.3	0.3	0.3	0.3	0.3	