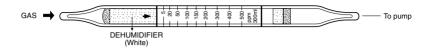
1-BUTANOL



1. PERFORMANCE

1) Measuring range 5-100 ppmNumber of pump strokes $3(300 \text{m} \ell)$

2) Sampling time : 4.5 minutes/3 pump strokes

3) Detectable limit ∴ 2 ppm 4) Shelf life ∴ 2 years 5) Operating temperature ∴ 0 ~ 40 °C

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

7) Reading : Graduations printed on the tube are calibrated by Ethyl cellosolve at 3 pump strokes

and 1-Butanol concentration is determined by using a conversion chart.

8) Colour change : Yellow→Pale blue

2. RELATIVE STANDARD DEVIATION

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

3. CHEMICAL REACTION

Chromium oxide is reduced.

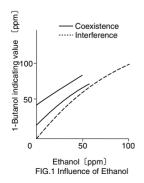
 $CH_3CH_2CH_2CH_2OH + Cr^{6+} + H_2SO_4 \rightarrow Cr^{3+}$

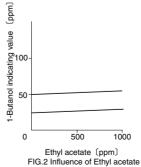
4. CALIBRATION OF THE TUBE

GAS CHROMATOGRAPHY

5. INTERFERENCE AND CROSS SENSITIVITY

Substance	ppm Interference		Coexistence	
Alcohols FIG.1		Similar stain is produced.	Higher readings are given.	
Toluene 200		Whole reagent is changed to Pale blue.	"	
Hexane	1,000	The accuracy of readings is not affected.	The accuracy of readings is not affected.	
Trichloroethylene	1,000	"	"	
Ethyl acetate FIG.2	1,000	"	"	





TEMPERATURE CORRECTION TABLE

Scale	True Concentration (ppm)						
Readings (ppm)	0 °C (32 °F)	10 ℃ (50 ° F)	20°C (68°F)	30°C (86°F)	40°C (104°F)		
100	-	_	100	85	77		
80	-	-	80	70	63		
60	-	80	60	53	50		
40	75	50	40	35	33		
20	30	23	20	18	16		
10	13	11	10	9	8		
5	5	5	5	5	5		

