FURAN

1. PERFORMANCE

1) Measuring range : 0.2-2.0% 0.01-0.9 % Number of pump strokes $1/2(50 \text{m} \ell)$ $1(100m\ell)$ 2) Sampling time 1.5 minutes/1 pump stroke

3) Detectable limit 10 ppm 4) Shelf life 3 years 5) Operating temperature $0 \sim 40 \,^{\circ}\text{C}$

6) Reading Graduations printed on the tube are calibrated by Ethylene oxide at 1 pump stroke

and Furan concentration is determined by using a conversion chart.

7) Colour change Orange → Black

2. RELATIVE STANDARD DEVIATION

RSD-low: 15% RSD-mid.: 10% RSD-high: 5%

3. CHEMICAL REACTION

Chromium oxide is reduced.

$$[] + Cr^{6+} + H_2SO_4 \rightarrow Cr^{3+}$$

4. CALIBRATION OF THE TUBE

GAS CHROMATOGRAPHY

5. INTERFERENCE AND CROSS SENSITIVITY

Substance		Interference	ppm	Coexistence
Aromatic hydrocarbons	FIG.1	Similar stain is produced.		Higher readings are given.
Esters	FIG.2	"		"
Ketones		"		
Alcohols	FIG.3	"		"
Halogenated hydrocarbons		Whole reagent is changed to Pale brown.	0.5%	"

50ml actual value

FIG.2 Influence of Ethyl acetate

8.0 0.1 4.

Furan (%)

In case of 1/2 pump stroke, following conversion scale is available for the actual concentration.

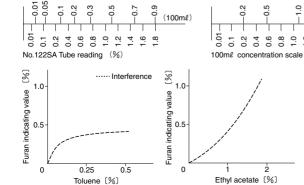


FIG.1 Influence of Toluene

