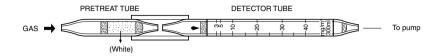
# ETHYLENE GLYCOL



## 1. PERFORMANCE

1) Measuring range  $3-40 \text{mg/m}^3$ Number of pump strokes  $3(300 \text{m} \ell)$ 

2) Sampling time : 4.5 minutes/3 pump strokes

3) Detectable limit  $\frac{1 \text{ Img/m}^3}{4}$  Shelf life  $\frac{3 \text{ years}}{5}$  Operating temperature  $\frac{15 \sim 40 \text{ }^{\circ}\text{C}}{1}$ 

6) Temperature compensation : Necessary (See "TEMPERATURE CORRECTION TABLE") 7) Reading : Direct reading from the scale calibrated by 3 pump strokes

8) Colour change : Pale pink → Yellow

### 2. RELATIVE STANDARD DEVIATION

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

## 3. CHEMICAL REACTION

By decomposing with an Oxidizer, Formic acid is produced and PH indicator is discoloured.

 $HOCH_2CH_2OH + HIO_4 \rightarrow 2HCHO + HIO_3 + H_2O$   $HCHO + HIO_4 + H_2SO_4 \rightarrow HCOOH + HIO_3$  $HCOOH + NaOH \rightarrow Na (HCOO) + H_2O$ 

## 4. CALIBRATION OF THE TUBE

GAS CHROMATOGRAPHY

## 5. INTERFERENCE AND CROSS SENSITIVITY

Substance	Interference	Coexistence	
Aldehydes	Similar stain is produced.	Higher readings are given.	
Sulphur dioxide	Brownish yellow stain is produced.	"	
Hydrogen sulphide	"	"	

#### TEMPERATURE CORRECTION TABLE

Scale	True Concentration (mg/m³)				
Readings (mg/m³)	15℃ (68° F)	20°C (71.6°F)	(77° F)	40°C (86°F)	
40	67	40	32	25	
30	50	30	24	19	
20	34	20	16	12	
10	17	10	8	6	
5	8	5	4	3	
3	5	3	2.5	2	