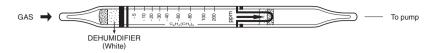
# **XYLENE**



### 1. PERFORMANCE

1) Measuring range 5-200 ppmNumber of pump strokes  $2(200 \text{m} \ell)$ 

2) Sampling time : 3 minutes/2 pump strokes

3) Detectable limit  $\therefore$  1 ppm 4) Shelf life  $\therefore$  2 years 5) Operating temperature  $\therefore$  0  $\sim$  40  $^{\circ}$ C

6) Temperature compensation : Necessary (See "TEMPERATURE CORRECTION TABLE") 7) Reading : Direct reading from the scale calibrated by 2 pump strokes

8) Colour change : White→Brown

# 2. RELATIVE STANDARD DEVIATION

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

## 3. CHEMICAL REACTION

Iodine pentoxide is reduced.  $C_6H_4$  (CH<sub>3</sub>)<sub>2</sub> + I<sub>2</sub>O<sub>5</sub> + H<sub>2</sub>SO<sub>4</sub>  $\rightarrow$  I<sub>2</sub>

#### 4. CALIBRATION OF THE TUBE

GAS CHROMATOGRAPHY

## 5. INTERFERENCE AND CROSS SENSITIVITY

| Substance              | ppm             | Interference                              | Coexistence                               |
|------------------------|-----------------|---|---|
| Toluene                | Xylene conc.1/5 | Same stain is produced.                   | Higher reading are given.                 |
| Ethyl acetate          |                 | The accuracy of readings is not affected. | The accuracy of readings is not affected. |
| Methyl isobutyl ketone |                 | "   | "   |
| Isobutyl alcohol       |                 | "   | "   |

#### TEMPERATURE CORRECTION TABLE

| Tube              | Corrected Concentration (ppm) |                  |                   |  |
|-------------------|-------------------------------|------------------|-------------------|--|
| Readings<br>(ppm) | 20°C<br>(68°F)                | 30 °C<br>(86 °F) | 40 °C<br>(104 °F) |  |
| 200               | 200                           | 300              | -                 |  |
| 150               | 150                           | 190              | 400               |  |
| 100               | 100                           | 125              | 150               |  |
| 80                | 80                            | 100              | 120               |  |
| 60                | 60                            | 70               | 80                |  |
| 40                | 40                            | 45               | 50                |  |
| 30                | 30                            | 30               | 30                |  |