tert-BUTYL METHYL ETHER



1. PERFORMANCE

1) Measuring range 25-500 ppmNumber of pump strokes $1(100\text{m}\ell)$

2) Sampling time : 1.5 minutes/1 pump stroke

3) Detectable limit : -4) Shelf life : 2 years
5) Operating temperature : $15 \sim 25$ °C

6) Reading : The tube scale is calibrated based on Ethyl acetate at 1 pump stroke and tert-Butyl methyl ether concentration is determined by using a conversion chart

at 1 pump stroke

7) Colour change : Yellow→Brown

2. RELATIVE STANDARD DEVIATION

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

3. CHEMICAL REACTION

Chromium oxide is reduced.

 $CH_3OC(CH_3)_3 + Cr^{6+} + H_2SO_4 \rightarrow Cr^{3+}$

4. CALIBRATION OF THE TUBE

GAS CHROMATOGRAPHY

5. INTERFERENCE AND CROSS SENSITIVITY

| Substance | Interference | Coexistence |
|--------------------------|---|---|
| Alcohols | Similar or brown stain is produced. | Higher readings are given. |
| Esters | " | " |
| Ketones | " | " |
| Aromatic hydrocarbons | " | " |
| Aliphatic hydrocarbons | Whole reagent is discoloured to Pale brown. | If the maximum end point of stained layer is discernable, the accuracy of readings is not affected. |
| Halogenated hydrocarbons | " | " |

tert-Butyl methyl ether concentration (ppm)

