

## 1. PERFORMANCE

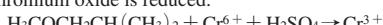
- 1) Measuring range : 0.01-0.6 %  
     Number of pump strokes     3 (300ml)
- 2) Sampling time           : 4.5 minutes/3 pump strokes  
   3) Detectable limit       : 10 ppm  
   4) Shelf life             : 3 years  
   5) Operating temperature : 0 ~ 40 °C  
   6) Temperature compensation : Necessary (See "TEMPERATURE CORRECTION TABLE")  
   7) Reading               : Graduations printed on the tube are calibrated by Ethylene oxide at 1 pump stroke and Methyl isobutyl ketone is determined by using a conversion chart at pump strokes.  
   8) Colour change        : Orange → Dark brown

## 2. RELATIVE STANDARD DEVIATION

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

## 3. CHEMICAL REACTION

Chromium oxide is reduced.



## 4. CALIBRATION OF THE TUBE

GAS CHROMATOGRAPHY

## 5. INTERFERENCE AND CROSS SENSITIVITY

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

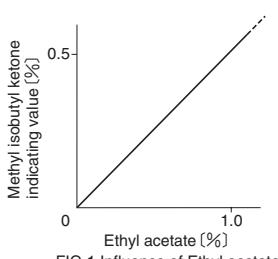


FIG.1 Influence of Ethyl acetate

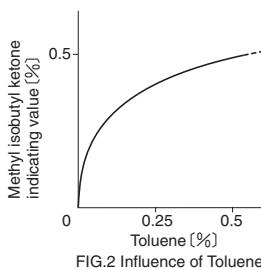
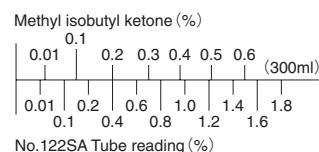


FIG.2 Influence of Toluene

### TEMPERATURE CORRECTION TABLE

| Conversion Value (%) | Corrected Concentration (%) |               |               |               |                |
|----------------------|-----------------------------|---------------|---------------|---------------|----------------|
|                      | 0 °C (32 °F)                | 10 °C (50 °F) | 20 °C (68 °F) | 30 °C (86 °F) | 40 °C (104 °F) |
| 0.6                  | —                           | —             | 0.60          | 0.55          | 0.52           |
| 0.5                  | —                           | —             | 0.50          | 0.46          | 0.43           |
| 0.4                  | —                           | —             | 0.40          | 0.37          | 0.35           |
| 0.3                  | —                           | —             | 0.30          | 0.26          | 0.27           |
| 0.2                  | —                           | 0.23          | 0.20          | 0.19          | 0.18           |
| 0.1                  | 0.16                        | 0.11          | 0.10          | 0.10          | 0.10           |
| 0.05                 | 0.05                        | 0.05          | 0.05          | 0.05          | 0.05           |



No.122SA Tube reading (%)