

## 1. PERFORMANCE

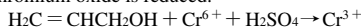
- 1) Measuring range : 20-500 ppm
- Number of pump strokes : 1 (100ml)
- 2) Sampling time : 1.5 minutes/1 pump stroke
- 3) Detectable limit : 5 ppm
- 4) Shelf life : 2 years
- 5) Operating temperature : 0 ~ 40 °C
- 6) Temperature compensation : Necessary (10 ~ 40 °C) (See "TEMPERATURE CORRECTION TABLE")
- 7) Reading : Graduations printed on the tube are calibrated by Methyl methacrylate at 1 pump stroke and Allyl alcohol concentration is determined by using a conversion chart.
- 8) Colour change : Pale yellow → Pale blue

## 2. RELATIVE STANDARD DEVIATION

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

## 3. CHEMICAL REACTION

Chromium oxide is reduced.

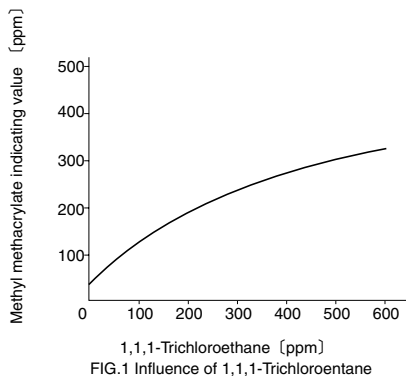


## 4. CALIBRATION OF THE TUBE

GAS CHROMATOGRAPHY

## 5. INTERFERENCE AND CROSS SENSITIVITY

| Substance   | Interference                       | Coexistence                |
|---|------------------------------------|----------------------------|
| Alcohols  | Similar stain is produced.         | Higher readings are given. |
| Ethers  | ∕                                  | ∕                          |
| Paraffin hydrocarbons (more than C <sub>3</sub> ) | Whole reagent is changed to Brown. | ∕                          |
| Aromatic hydrocarbons                             | ∕                                  | ∕                          |
| Esters  | ∕                                  | ∕                          |
| Ketones   | ∕                                  | ∕                          |
| Halogenated hydrocarbons FIG.1                    | ∕                                  | ∕                          |



TEMPERATURE CORRECTION TABLE

| Scale Readings (ppm) | True Concentration (ppm) |               |               |               |                |
|----------------------|--------------------------|---------------|---------------|---------------|----------------|
|                      | 0 °C (32 °F)             | 10 °C (50 °F) | 20 °C (68 °F) | 30 °C (86 °F) | 40 °C (104 °F) |
| 500                  | —                        | 600           | 500           | 430           | 380            |
| 400                  | —                        | 480           | 400           | 350           | 300            |
| 300                  | 480                      | 360           | 300           | 260           | 230            |
| 200                  | 320                      | 240           | 200           | 170           | 150            |
| 100                  | 240                      | 120           | 100           | 90            | 80             |
| 50                   | 80                       | 60            | 50            | 43            | 38             |
| 20                   | 32                       | 24            | 20            | 17            | 15             |

