

1. PERFORMANCE

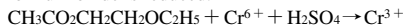
- | | |
|-----------------------------|--|
| 1) Measuring range | : 5-150 ppm |
| Number of pump strokes | 3 (300ml) |
| 2) Sampling time | : 4.5 minutes/3 pump strokes |
| 3) Detectable limit | : 2 ppm |
| 4) Shelf life | : 2 years |
| 5) Operating temperature | : 10 ~ 35 °C |
| 6) Temperature compensation | : Necessary (See "TEMPERATURE CORRECTION TABLE") |
| 7) Reading | : Graduations printed on the tube are calibrated by Ethyl cellosolve at 3 pump strokes and Ethyl cellosolve acetate concentration is determined by using a conversion chart. |
| 8) Colour change | : Yellow → Pale blue |

2. RELATIVE STANDARD DEVIATION

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

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 ₃) | Whole reagent is changed to Pale Brown. | ∕ |
| Aromatic hydrocarbons | ∕ | ∕ |
| Esters | ∕ | ∕ |
| Ketones | ∕ | ∕ |
| Halogenated hydrocarbons | ∕ | ∕ |

FIG.1

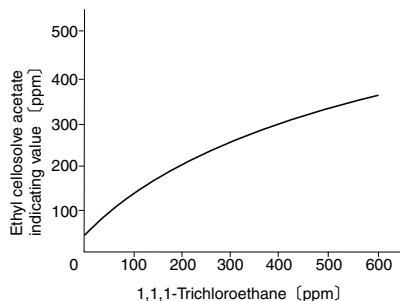
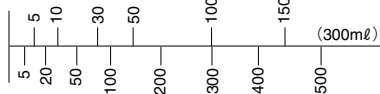


FIG.1 Influence of 1,1,1-Trichloroethane

Ethyl cellosolve acetate (ppm)



No.190U Tube reading (ppm)

TEMPERATURE CORRECTION TABLE

| Scale Readings (ppm) | True Concentration (ppm) | | | | |
|----------------------|--------------------------|------------------|------------------|------------------|------------------|
| | 10 °C (50 °F) | 15 °C (59 °F) | 20 °C (68 °F) | 25 °C (77 °F) | 35 °C (95 °F) |
| 150 | 225 | 190 | 150 | 115 | 90 |
| 100 | 160 | 130 | 100 | 80 | 65 |
| 50 | 80 | 60 | 50 | 40 | 35 |
| 20 | 25 | 23 | 20 | 18 | 16 |
| 10 | 10 | 10 | 10 | 10 | 8 |
| 5 | 5 | 5 | 5 | 5 | 5 |