

1. PERFORMANCE

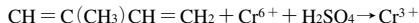
- 1) Measuring range : 1-16 ppm
Number of pump strokes : 3 (300mℓ)
- 2) Sampling time : 4.5 minutes/3 pump strokes
- 3) Detectable limit : 0.5 ppm
- 4) Shelf life : 2 years
- 5) Operating temperature : 0 ~ 40 °C
- 6) Temperature compensation : Necessary (See "TEMPERATURE CORRECTION TABLE")
- 7) Reading : Graduations printed on the tube are calibrated by Ethyl cellosolve at 3 pump strokes and Isoprene 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.



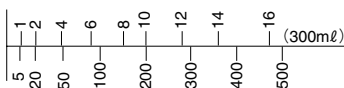
4. CALIBRATION OF THE TUBE

GAS CHROMATOGRAPHY

5. INTERFERENCE AND CROSS SENSITIVITY

| Substance | Interference | Coexistence |
|---|---|----------------------------|
| Alcohols | Similar stain is produced. | Higher readings are given. |
| Ethers | ∕ | ∕ |
| Aliphatic hydrocarbons (over C ₃) | Whole reagent is changed to Pale brown. | ∕ |
| Aromatic hydrocarbons | ∕ | ∕ |
| Esters | ∕ | ∕ |
| Ketones | ∕ | ∕ |
| Halogenated hydrocarbons | ∕ | ∕ |

Isoprene (ppm)



No.190U Tube reading (ppm)

TEMPERATURE CORRECTION TABLE

| Scale Readings (ppm) | Corrected Concentration (ppm) | | | | |
|----------------------|-------------------------------|---------------|---------------|---------------|----------------|
| | 0 °C (32 °F) | 10 °C (50 °F) | 20 °C (68 °F) | 30 °C (86 °F) | 40 °C (104 °F) |
| 16 | 20.5 | 18.0 | 16.0 | 14.5 | 13.0 |
| 14 | 18.0 | 15.5 | 14.0 | 12.5 | 11.0 |
| 12 | 15.5 | 13.5 | 12.0 | 10.5 | 9.5 |
| 10 | 12.5 | 11.0 | 10.0 | 9.0 | 8.0 |
| 8 | 10.0 | 9.0 | 8.0 | 7.5 | 6.5 |
| 6 | 7.5 | 6.5 | 6.0 | 6.0 | 5.0 |
| 4 | 5.0 | 4.0 | 4.0 | 4.0 | 3.5 |
| 2 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |
| 1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |