

1. PERFORMANCE

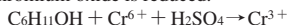
- 1) Measuring range : 5-500 ppm
Number of pump strokes : 2 (200ml)
- 2) Sampling time : 3 minutes/2 pump strokes
- 3) Detectable limit : 2 ppm
- 4) Shelf life : 2 years
- 5) Operating temperature : 10 ~ 40 °C
- 6) Temperature compensation : Necessary (See "TEMPERATURE CORRECTION TABLE")
- 7) Reading : Direct reading from the scale calibrated by 2 pump strokes
- 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 |
|---|---|--|
| Aliphatic hydrocarbons (more than C ₃) | Whole reagent is changed to Pale brown. | The accuracy of reading is not affected. |
| Aromatic hydrocarbons | // | // |
| Halogenated hydrocarbons | // | // |
| Alcohols | FIG.1 Similar stain is produced. | Higher readings are given. |
| Esters | Pale ringed stain is produced near the bottom of the reagent. | The accuracy of reading is not affected. |

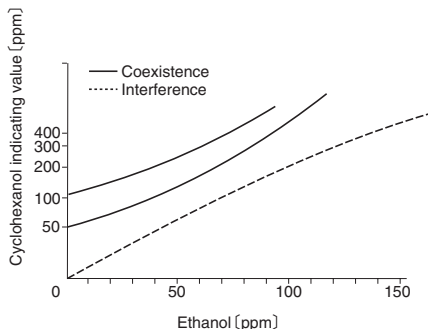


FIG.1 Influence of Ethanol

TEMPERATURE CORRECTION TABLE

| Tube Readings (ppm) | Corrected Concentration (ppm) | | | | | | |
|---------------------|-------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|
| | 10 °C (50 °F) | 15 °C (59 °F) | 20 °C (68 °F) | 25 °C (77 °F) | 30 °C (80 °F) | 35 °C (95 °F) | 40 °C (95 °F) |
| 500 | — | — | 500 | 380 | 280 | 210 | 160 |
| 400 | — | 520 | 400 | 300 | 230 | 170 | 130 |
| 300 | — | 400 | 300 | 220 | 170 | 130 | 100 |
| 200 | — | 270 | 200 | 140 | 110 | 90 | 70 |
| 100 | 230 | 140 | 100 | 90 | 70 | 50 | 40 |
| 50 | 90 | 70 | 50 | 40 | 35 | 20 | 15 |
| 30 | 50 | 40 | 30 | 25 | 18 | 14 | 10 |
| 10 | 18 | 13 | 10 | 8 | 6 | 4 | 2 |
| 5 | 9 | 7 | 5 | 4 | 3 | 2 | 1 |