

1. PERFORMANCE

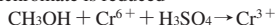
- 1) Measuring range : 0.05-6.0 %
Number of pump strokes : 1 (100ml)
- 2) Sampling time : 1.5 minutes/1 pump stroke
- 3) Detectable limit : 0.01 % (100 ppm)
- 4) Shelf life : 3 years
- 5) Operating temperature : 0 ~ 40 °C
- 6) Temperature compensation : Necessary (See "TEMPERATURE CORRECTION TABLE")
- 7) Reading : Direct reading from the scale calibrated by 1 pump stroke
- 8) Colour change : Yellow orange → Pale green

2. RELATIVE STANDARD DEVIATION

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

3. CHEMICAL REACTION

Dichromate is reduced



4. CALIBRATION OF THE TUBE

GAS CHROMATOGRAPHY

5. INTERFERENCE AND CROSS SENSITIVITY

| Substance | Interference | ppm | Coexistence |
|---|---|-----|---|
| Aliphatic hydrocarbons (more than C ₃) FIG.1 | Similar stain is produced. | | Higher readings are given. |
| Alcohols FIG.2 | ∕ | | ∕ |
| Esters | ∕ | 50 | ∕ |
| Ketones | ∕ | | ∕ |
| Aromatic hydrocarbons | ∕ | | ∕ |
| Halogenated hydrocarbons | Reagent is discoloured to Brown slightly. | | If the top of the discolouration can be obtained, the accuracy of readings is not affected. |

(NOTE)

Although the top of light green stain changes to Brown gradually, read the concentration on the top of the light green stain shortly.

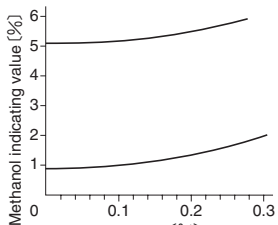


FIG.1 Influence of Hexane

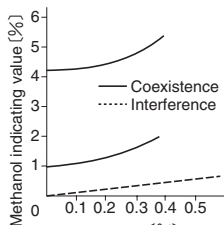


FIG.2 Influence of Ethanol

TEMPERATURE CORRECTION TABLE

| Tube Readings (%) | Corrected Concentration (%) | | | | |
|-------------------|-----------------------------|---------------|---------------|---------------|----------------|
| | 0 °C (32 °F) | 10 °C (50 °F) | 20 °C (68 °F) | 30 °C (86 °F) | 40 °C (104 °F) |
| 6.0 | — | — | 6.0 | 4.3 | 3.3 |
| 5.0 | — | — | 5.0 | 3.7 | 2.8 |
| 4.0 | — | — | 4.0 | 3.0 | 2.3 |
| 3.0 | — | 5.1 | 3.0 | 2.3 | 1.8 |
| 2.0 | — | 3.0 | 2.0 | 1.6 | 1.2 |
| 1.0 | 2.7 | 1.4 | 1.0 | 0.8 | 0.6 |
| 0.5 | 1.0 | 0.7 | 0.5 | 0.4 | 0.3 |
| 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |