

**1. PERFORMANCE**

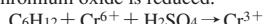
- 1) Measuring range : 0.01-0.6%
 Number of pump strokes 1 (100mL)
 2) Sampling time : 1 minute / 1 pump stroke
 3) Detectable limit : —
 4) Shelf life : 3 years
 5) Operating temperature : 10~40°C
 6) Temperature compensation : Necessary (See "TEMPERATURE CORRECTION TABLE")
 7) Reading : Direct reading from the scale calibrated by 1 pump stroke
 8) Colour change : Orange → Dark green

2. RELATIVE STANDARD DEVIATION

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

3. CHEMICAL REACTION

Chromium oxide is reduced.

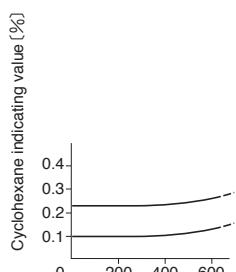
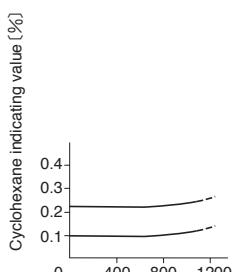
**4. CALIBRATION OF THE TUBE**

GAS CHROMATOGRAPHY

5. INTERFERENCE AND CROSS SENSITIVITY

| Substance | Interference | ppm | Coexistence |
|--|---------------------------------------|-------|----------------------------|
| Benzene FIG.1 | Black stain is produced. | 400 | Higher readings are given. |
| Toluene FIG.2 | 〃 | 800 | 〃 |
| Xylene | 〃 | 2,000 | 〃 |
| Acetylene | Whole layer is changed to dark green. | — | 〃 |
| Ethylene | Similar stain is produced. | — | 〃 |
| Aliphatic hydrocarbons (more than C ₃) | 〃 | — | 〃 |

*In presence of Alcohols, Ketones or Esters less than 6%, the accuracy of readings is not affected.

Benzene (ppm)
FIG.1 Influence of BenzeneToluene (ppm)
FIG.2 Influence of Toluene**TEMPERATURE CORRECTION TABLE**

| Tube Readings (%) | Corrected Concentration (%) | | | |
|-------------------|-----------------------------|-------------|-------------|-------------|
| | 10°C (50°F) | 15°C (59°F) | 20°C (68°F) | 30°C (86°F) |
| 0.6 | 0.73 | 0.67 | 0.60 | 0.53 |
| 0.5 | 0.62 | 0.54 | 0.50 | 0.45 |
| 0.4 | 0.48 | 0.43 | 0.40 | 0.36 |
| 0.3 | 0.34 | 0.32 | 0.30 | 0.28 |
| 0.2 | 0.22 | 0.21 | 0.20 | 0.19 |
| 0.1 | 0.10 | 0.10 | 0.10 | 0.10 |
| 0.05 | 0.05 | 0.05 | 0.05 | 0.05 |
| 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |