



1. PERFORMANCE

- 1) Measuring range : 0.2-6.0 ppm 0.1-3.0 ppm
Number of pump strokes : 1/2 (50mL) 1 (100mL)
- 2) Sampling time : 1 minute/1 pump stroke
- 3) Detectable limit : 0.05 ppm (100mL)
- 4) Shelf life : 2 years
- 5) Operating temperature : 0~40 °C
- 6) Temperature compensation : Necessary (See "TEMPERATURE CORRECTION TABLE")
- 6) Reading : Direct reading from the scale calibrated by 1 pump stroke
- 7) Colour change : Pale yellow → Pink

2. RELATIVE STANDARD DEVIATION

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

3. CHEMICAL REACTION

By reacting with silver compound, Acidic product is produced and PH indicator is discoloured.

4. CALIBRATION OF THE TUBE

PERMEATION TUBE METHOD

5. INTERFERENCE AND CROSS SENSITIVITY

| Substance | ppm | Interference | ppm | Coexistence |
|-------------------|-------|---|------|---|
| Sulphur dioxide | <1000 | The accuracy of readings is not affected. | | The accuracy of readings is not affected. |
| Nitrogen dioxide | 50 | Whole reagent is changed to Pale orange. | 1.0 | Lower readings are given. |
| Ammonia | | The accuracy of readings is not affected. | 1.0 | The pink stain fades from the zero end of the detecting reagents(inlet side of the tube). |
| Arsine | | Whole reagent is changed to Pale orange. | 0.25 | Higher readings are given. |
| Hydrogen selenide | 0.5 | Similar stain is produced. | | // |
| Mercaptans | 0.2 | // | | // |
| Phosphine | | Whole reagent is changed to Pale pink. | 0.4 | // |
| Hydrogen cyanide | | Whole reagent is changed to Pale orange. | <1.0 | The accuracy of readings is not affected if the maximum end point of the pink stain is discernable. |

(NOTE)

In case of 1/2 pump strokes, following formula is available for the actual concentration.

Actual concentration = 2 × Reading value

TEMPERATURE CORRECTION COEFFICIENT TABLE (AT 20°C)

| Temperature(°C) | 0 | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 |
|-------------------|------|------|------|------|-----|-----|------|------|------|
| Correction Factor | 0.80 | 0.85 | 0.90 | 0.95 | 1.0 | 1.0 | 1.05 | 1.10 | 1.15 |

Actual concentration = Reading value × Coefficient for temperature correction