HYDROGEN PEROXIDE



PERFORMANCE

1) Measuring range : 0.5-10.0ppm Number of pump strokes 5(500mL)

2) Sampling time : 7.5 minutes/5 pump strokes

3) Detectable limit : 0.2 ppm

4) Shelf life : 1 year (Necessary to store in a refrigerated place; $0 \sim 10^{\circ}$ C)

5) Operating temperature : $0 \sim 40$ °C

6) Temperature compensation: Necessary (See "NOTE")

7) Reading : Direct reading from the scale calibrated by 5 pump strokes

8) Colour change : White \rightarrow Yellow

2. RELATIVE STANDARD DEVIATION

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

3. CHEMICAL REACTION

By reacting with Titanium sulphate, yellow complex is generated. $H_2O_2 + Ti(SO_4)_2 \rightarrow H_2[TiO_2(SO_4)_2]$

4. CALIBRATION OF THE TUBE

DIFFUSION TUBE METHOD

5. INTERFERENCE AND CROSS SENSITIVITY

| Substance | Interference | ppm | Coexistence | | | | |
|------------------|--|-----|--|--|--|--|--|
| Chlorine | The accuracy of reading is not affected. | | The accuracy of reading is not affected. | | | | |
| 0zone | " | | " | | | | |
| Nitrogen dioxide | " | | " | | | | |
| Acetaldehyde | " | | " | | | | |
| Formaldehyde | " | 10 | Lower readings are given. | | | | |

(NOTF)

The scale is calibrated based on the temperature of 20° C (68° F). Readings obtained in under 15° C (59°) should be corrected with the following temperature correction table.

TEMPERATURE CORRECTION COEFFICIENT TABLE (AT 20°C)

| Temperature (°C) | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Correction Factor | 1. 35 | 1. 32 | 1. 28 | 1. 25 | 1. 23 | 1. 20 | 1. 17 | 1. 15 | 1. 13 | 1. 11 |
| Temperature (°C) | 10 | 11 | 12 | 13 | 14 | 15 | | | | |
| Correction Factor | 1. 09 | 1. 07 | 1. 06 | 1. 05 | 1. 03 | 1. 02 | | | | |

Actual concentration = Reading value × Coefficient for temperature correction