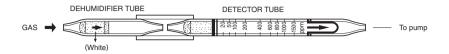
FORMALDEHYDE



1. PERFORMANCE

1) Measuring range 20-1,500 ppm Number of pump strokes $1(100 \text{m} \ell)$

2) Sampling time : 1.5 minute s/1 pump stroke

3) Detectable limit : 5 ppm

4) Shelf life : 2 years (Necessary to store in refrigerated conditions ; $0 \sim 10 \, ^{\circ}\text{C}$)

5) Operating temperature : $0 \sim 40 \,^{\circ}\text{C}$

6) Temperature compensation : Necessary (See "TEMPERATURE CORRECTION TABLE")
7) Reading : Direct reading from the scale calibrated by 1 pump stroke

: Yellow → Pink

8) Colour change

2. RELATIVE STANDARD DEVIATION

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

3. CHEMICAL REACTION

By reacting with Hydroxylamine phosphate, Phosphoric acid is liberated and PH indicator is discoloured. $HCHO + (NH_2OH)_3 \cdot H_3PO_4 \rightarrow H_3PO_4 + HCH = NOH + H_2O$

4. CALIBRATION OF THE TUBE

ABSORPTIOMETRIC METHOD

5. INTERFERENCE AND CROSS SENSITIVITY

| Substance | Interference | ppm | Coexistence | |
|-----------------|---|------------------------------------|----------------------------|--|
| Other Aldehydes | Similar stain is produced. | | Higher readings are given. | |
| Ketones | " | | " | |
| Methanol | The accuracy of readings is not affected. | Formal- dehyde conc. ×1/2 | Lower readings are given. | |

TEMPERATURE CORRECTION TABLE

| Tube | Corrected Concentration (ppm) | | | | | | | |
|-------------------|-------------------------------|-----------------|------------------|------------------|------------------|------------------|-------------------|--|
| Readings (ppm) | 0°C (32°F) | 10 ℃ (50 °F) | 20 °C (68 °F) | 25 °C (77 °F) | 30 °C (86 °F) | 35 °C (95 °F) | 40 °C (104 °F) | |
| 1500 | _ | _ | 1500 | 900 | 690 | 530 | 410 | |
| 1000 | _ | _ | 1000 | 700 | 550 | 430 | 340 | |
| 800 | _ | 1300 | 800 | 600 | 490 | 390 | 300 | |
| 600 | 1200 | 900 | 600 | 490 | 410 | 330 | 250 | |
| 400 | 600 | 520 | 400 | 350 | 290 | 230 | 180 | |
| 200 | 240 | 230 | 200 | 180 | 150 | 130 | 100 | |
| 130 | 100 | 100 | 100 | 90 | 80 | 70 | 60 | |
| 50 | 50 | 50 | 50 | 45 | 40 | 35 | 30 | |
| 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | |