

# Formaldehyde 0.2/a

Order No. 67 33 081

E

## Application Range

|                           |                 |                  |
|---------------------------|-----------------|------------------|
| Standard Measuring Range: | 0.5 to 5        | / 0.2 to 2.5 ppm |
| Number of Strokes n:      | 10              | / 20             |
| Time for Measurement:     | approx. 1.5 min | / approx. 3 min  |
| Standard Deviation:       | ± 20 to 30 %    |                  |
| Color Change:             | white → pink    |                  |

## Ambient Operating Conditions

|                    |               |
|--------------------|---------------|
| Temperature:       | 10 to 40 °C   |
| Absolute Humidity: | 3 to 15 mg/ L |

## Reaction Principle

$$\text{HCHO} + \text{C}_6\text{H}_4(\text{CH}_3)_2 + \text{H}_2\text{SO}_4 \rightarrow \text{quinoid reaction products}$$

## Cross Sensitivity

Styrene, vinyl acetate, acetaldehyde, acrolein, diesel fuel and furfuryl alcohol are indicated with a yellowish brown discoloration. 500 ppm octane, 5 ppm nitric oxide and 5 ppm nitrogen dioxide have no effect.

## Extension of the Measuring Range

The measuring range can be extended in conjunction with the activation tube (Order No. 81 01 141). The following information applies to the n = 20 stroke scale:

| Pump Strokes | Scale divided by | Range            |
|--------------|------------------|------------------|
| 40           | 2                | 0.1 to 1.25 ppm  |
| 80           | 4                | 0.05 to 0.63 ppm |
| 100          | 5                | 0.04 to 0.5 ppm  |

