# **NITROGEN DIOXIDE**

#### 1. PERFORMANCE

1) Measuring range 0.1-1.0 ppm Number of pump strokes  $3(300\text{m}\ell)$ 

2) Sampling time : 135 seconds (45 seconds/1 pump stroke)

3) Detectable limit  $\begin{array}{c} \text{3.001 ppm } (300\text{m}\,\ell) \\ \text{4) Shelf life} \\ \text{5) Operating temperature} \\ \end{array}$ 

6) Reading : Direct reading from the scale calibrated by 3 pump strokes

7) Colour change : White→Pale purple

## 2. RELATIVE STANDARD DEVIATION

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

### 3. CHEMICAL REACTION

NO<sub>2</sub> + 3, 3'-Dimethylnaphthidine → Nitroso-compounds

#### 4. CALIBRATION OF THE TUBE

PERMEATION TUBE METHOD

# 5. INTERFERENCE AND CROSS SENSITIVITY

Substance	ppm	Interference	ppm	Coexistence
Chlorine	3	Similar stain is produced.	3	Higher readings are given.
Ozone		The accuracy of readings is not affected.	2	"
Sulphur dioxide		"	7	Lower readings are given.
Formaldehyde		"		The accuracy of readings is not affected.
Formic acid		"		"
Carbon monoxide		"		"
Carbon dioxide		"		"
Ethyl alcohol		"		"