NITRIC ACID VAPOUR



1. PERFORMANCE

1) Measuring range 2-20 ppm 1-10 ppm Number of pump strokes $1(100\text{m}\ell)$ $2(200\text{m}\ell)$ 2) Sampling time 1.5 minutes/1 pump stroke

3) Detectable limit : $0.5 \mathrm{ppm} (200 \mathrm{m} \ell)$

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

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

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

8) Colour change : Pale yellow→Purple

2. RELATIVE STANDARD DEVIATION

RSD-low: 15% RSD-mid.: 15% RSD-high: 10%

3. CHEMICAL REACTION

PH indicator is discoloured

4. CALIBRATION OF THE TUBE

COLOURIMETRY METHOD

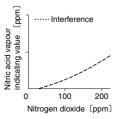
5. INTERFERENCE AND CROSS SENSITIVITY

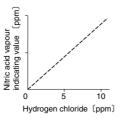
Substance		Interference ppm		Coexistence		
Hydrogen fluoride		Similar stain is produced.	8	The top of discoloured layer becomes unclear and higher readings are given.		
Nitrogen dioxide	FIG.1	"	50	"		
Hydrogen chloride	FIG.2	"		Higher readings are given.		

(NOTE)

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

Actual concentration = $1/2 \times$ Temperature corrected value





TEMPERATURE CORRECTION TABLE

Scale	True Concentration (ppm)							
Readings (ppm)	0°C (41°F)	10℃ (50°F)	15℃ (59°F)	20°C (68°F)	30°C (86°F)	40 °C (104 °F)		
20	-	35	25	20	15	13		
15	43	25	19	15	12	10		
10	27	17	12	10	8	7		
5	14	9	6	5	4	4		
2	6	4	3	2	2	2		

FIG.1 Influence of Nitrogen dioxide

FIG.2 Influence of Hydrogen chloride