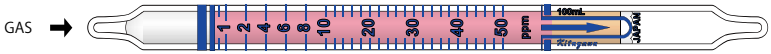
Tube No.
216S

FORMIC ACID



1. PERFORMANCE

1) Measuring range	:	1-50 ppm
Number of pump strokes		1(100mL)
2) Sampling time	:	1.5 minutes/1 pump stroke
3) Detectable limit	:	0.2 ppm(100mL)
4) Shelf life	:	3 years
5) Operating temperature	:	0～40℃
6) Temperature compensation	:	Necessary (0～20℃) (See "TEMPERATURE CORRECTION TABLE")
7) Reading	:	Direct reading from the scale calibrated by 1 pump stroke
8) Colour change	:	Pale pink→Yellow

2. RELATIVE STANDARD DEVIATION

RSD-low：10%　RSD-mid.：10%　RSD-high：10%

3. CHEMICAL REACTION

By reacting with alkali, PH indicator is discoloured.

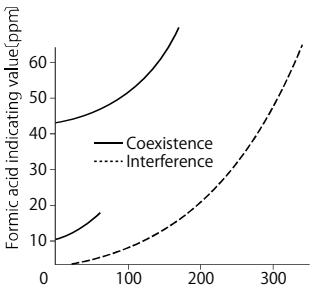
$HCOOH + NaOH \rightarrow HCOONa + H_2O$

4. CALIBRATION OF THE TUBE

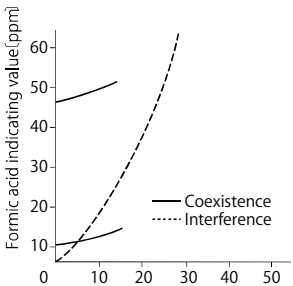
DIFFUSION TUBE METHOD

5. INTERFERENCE AND CROSS SENSITIVITY

Substance	ppm	Interference	ppm	Coexistence
Sulphur dioxide		Similar stain is produced.	HCO_2Hconc. ×1/20	Higher readings are given.
Nitrogen dioxide	300	〃	10	The top of discoloured layer becomes unclear.
Hydrogen chloride FIG.1		Pink stain is produced.	HCO_2Hconc. ×2	Higher readings are given.
Chlorine FIG.2		Yellow stain is produced.	5	〃
Acetic acid		Similar stain is produced.		〃



Hydrogen chloride(ppm)
FIG.1 Influence of Hydrogen chloride



Chlorine (ppm)
FIG.2 Influence of Chlorine

TEMPERATURE CORRECTION TABLE

Tube Readings (ppm)	Corrected Concentration (ppm)		
	0℃ (32℉)	10℃ (50℉)	20～40℃ (68℉)
50	82	60	50
40	57	45	40
30	36	32	30
20	22	21	20
10	10	10	10

(NOTE)

This tube scale is calibrated based on Acetic acid and the same scale is available for Formic acid.