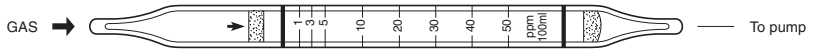
Tube No.
216S

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 : 0.1 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

VAPOUR PRESSURE 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.		〃

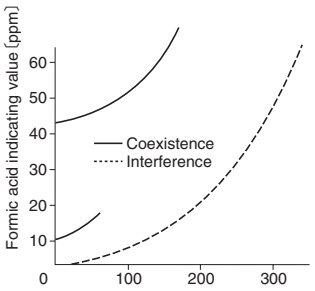


FIG.1 Influence of Hydrogen chloride

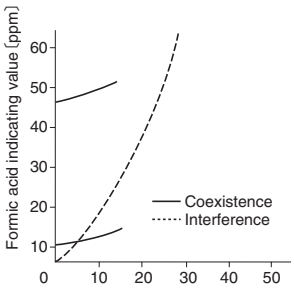


FIG.2 Influence of Chlorine

TEMPERATURE CORRECTION TABLE

Tube Readings (ppm)	Corrected Concentration (ppm)		
	0℃ (32˚F)	10℃ (50˚F)	20～40℃ (68˚F)
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.