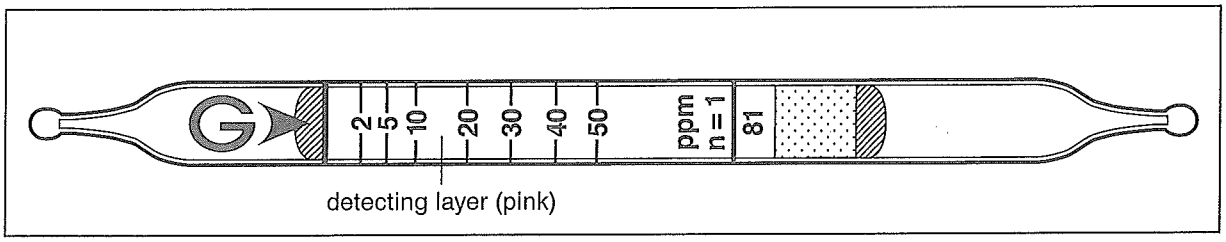
Acetic Acid CH_3CO_2H No.81



Performance

Measuring range	1 to 2 ppm	2 to 50 ppm	50 to 100 ppm
Number of pump strokes	2 (200 ml)	1 (100 ml)	1/2 (50 ml)
Correction factor	1/2	1	2
Sampling time	1.5 min	45 sec	30 sec

Detecting limit : 0.2 ppm (2 pump strokes)
Colour change : Pink → Yellow
Corrections for temperature & humidity : Humidity correction is necessary.
Relative standard deviation : 10 %(for 2 to 10 ppm), 5 %(for 10 to 50 ppm)
Shelf life : 3 years

Reaction principle

CH_3CO_2H + Base → Reaction product

Possible coexisting substances and their interferences (NOTE : Page 2-5)

Substance	Concentration	Interference	Changes colour by itself to
Chlorine	≧ 1/2	+	Yellow
Hydrogen chloride	≧ 3 times	+	
Hydrogen cyanide	≧ 3 times	+	
Nitric acid	≧ 3 times	+	
Nitrogen dioxide	≧ 1/2	+	
Sulphur dioxide	≧ 1/2	+	

Other substances measurable with this detector tube

Substance	Correction	No. of pump strokes	Measuring range
Acetic anhydride	Factor : 0.3	1	0.6 to 15 ppm
Acrylic acid	Factor : 1.0	1	2 to 50 ppm
Formic acid	Factor : 2.6	1	5.2 to 130 ppm
Isovaleric acid	Factor : 1.0	1	2 to 50 ppm
Maleic anhydride	Factor : 0.4	1	0.8 to 20 ppm
Methacrylic acid	Factor : 0.9	1	1.8 to 45 ppm
Propionic acid	Factor : 1.5	1	3 to 75 ppm

Calibration gas generation

Diffusion tube method

TLV-TWA : 10 ppm TLV-STEL : 15 ppm Explosive range : 4 to 19.9 %