| Detector tube | # Formaldehyde HCHO | **No.91TP** |

detecting layer (yellow)

Performance
The minimum scale value (0.01ppm) is not printed on the tube, but only the scale line is printed.

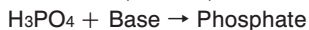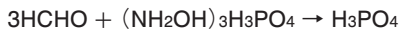| Measuring range	(0.01) to 0.50 ppm	0.50 to 1.75 ppm
Sampling Rate	100 ml/min (1000ml)	50 ml/min (500ml)
Correction factor	1	3.5
Sampling time	10 min	10 min

Detecting limit : 0.005 ppm (1000 ml)
Colour change : Yellow → Pale orange
Corrections for temperature : Necessary for 5 to 35 $^{\circ}$C
Corrections for humidity : Unnecessary for R.H.0 to 80 %
Relative standard deviation : 10% (for 0.01 to 0.10 ppm), 5% (for 0.10 to 0.50 ppm)
Shelf life : 1 year (in the refrigerator)

Reaction principle

$3HCHO + (NH_2OH)_3H_3PO_4 \rightarrow H_3PO_4$
$H_3PO_4 + Base \rightarrow Phosphate$

Possible coexisting substances and their interferences

Substance	Concentration	Interference	Changes colour by itself to
Acetaldehyde		+	Pale orange
Acetone		+	Pale orange
Ethanol	0.15%	−	Yellow
Xylene	50 ppm	No	No
Ammonia	≧ 1 ppm	−	Yellow
Nitrogen dioxide	≦ 1 ppm	No	No

Calibration gas generation

Permeation tube method