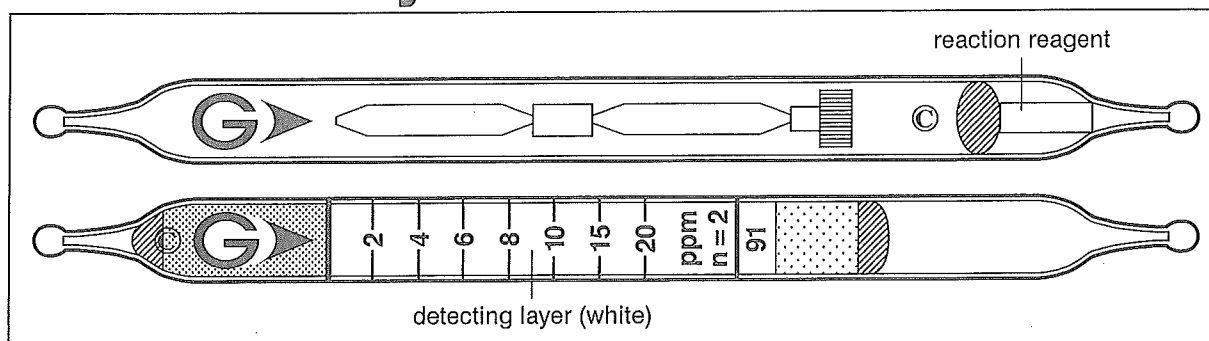


Formaldehyde HCHO

No.91



Performance

When used, these tubes are to be connected. See page 2-3.

Measuring range	2 to 20 ppm	20 to 50 ppm	50 to 100 ppm
Number of pump strokes	2 (200 ml)	1 (100 ml)	1/2 (50 ml)
Correction factor	1	2.5	5
Sampling time	1.5 min	45 sec	30 sec

Detecting limit : 0.5 ppm (2 pump strokes)
 Colour change : White → Brown
 Corrections for temperature & humidity : Unnecessary
 Relative standard deviation : 15 % (for 2 to 6 ppm), 10 % (for 6 to 20 ppm)
 Shelf life : 3 years

Reaction principle

Pretreatment tube : Gas mixing

Detector tube : $\text{HCHO} + \text{C}_6\text{H}_4(\text{CH}_3)_2 + \text{H}_2\text{S}_2\text{O}_7 \rightarrow \text{Condensation polymer}$

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

Substance	Concentration	Interference	Changes colour by itself to
Aldehydes	$\geq 1/2$	+	Brown
Styrene	≥ 500 ppm	+	Yellow
Esters, Ethers, Ketones	≥ 1000 ppm	+	No

Calibration gas generation

Diffusion tube method

TLV-STEL : C 0.3 ppm

Explosive range : 7.0 to 73 %