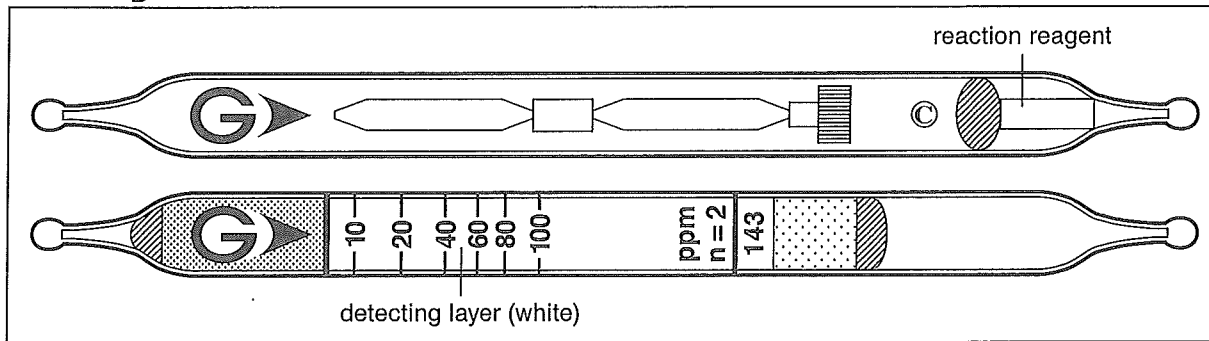


Vinyl Acetate $\text{CH}_3\text{CO}_2\text{CH}:\text{CH}_2$

No.143



Performance

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

Measuring range	5 to 10 ppm	10 to 100 ppm	100 to 250 ppm
Number of pump strokes	4 (400 ml)	2 (200 ml)	1 (100 ml)
Correction factor	1/2	1	2.5
Sampling time	2 min	1 min	30 sec

Detecting limit : 1 ppm (4 pump strokes)

Colour change : White → Brown

Corrections for temperature & humidity : Unnecessary

Relative standard deviation : 15 % (for 10 to 20 ppm), 10 % (for 20 to 100 ppm)

Shelf life : 3 years

Reaction principle

Pretreatment tube : Gas mixing

Detector tube : $\text{CH}_3\text{CO}_2\text{CH}:\text{CH}_2 + \text{C}_6\text{H}_5(\text{CH}_3)_3 + \text{H}_2\text{S}_2\text{O}_7 \rightarrow \text{Condensation polymer}$

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

Substance	Concentration	Interference	Changes colour by itself to
Aldehydes, Ketones		+	Brown
Ethylene	≥ 1000 ppm	+	} Yellow
Vinyl chloride	≥ 500 ppm	+	

Calibration gas generation

Diffusion tube method

TLV-TWA : 10 ppm

TLV-STEL : 15 ppm

Explosive range : 2.6 to 13.4 %