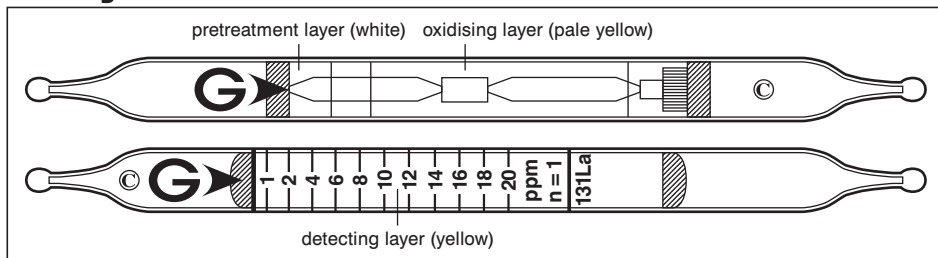


Vinyl Chloride $\text{CH}_2\text{:CHCl}$

No.131La



Performance

When used, these tubes are to be connected.

Measuring range	0.25 to 0.5 ppm	0.5 to 1 ppm	1 to 20 ppm	20 to 54 ppm
Number of pump strokes	4 (400ml)	2 (200ml)	1 (100 ml)	1/2 (50 ml)
Correction factor	1/4	1/2	1	2.7
Sampling time	4 min	2 min	1 min	45 sec

Detecting limit : 0.05 ppm (4 pump strokes)

Colour change : Yellow → Reddish brown

Corrections for temperature & humidity : Unnecessary

Relative standard deviation : 10 % (for 1 to 6 ppm), 5 % (for 6 to 20 ppm)

Shelf life : 2 years (in the refrigerator)

Reaction principle

Pretreatment tube : $\text{CH}_2\text{:CHCl} + \text{Cr}^{6+} + \text{H}_2\text{SO}_4 \rightarrow \text{HCl}$

Detector tube : $\text{HCl} + \text{Base} \rightarrow \text{Chloride}$

Possible coexisting substances and their interferences

Substance	Concentration	Interference	Changes colour by itself to
Tetrachloroethylene	≥ 3 times	+	} Reddish brown
Trichloroethylene	$\geq 1/2$	+	
Xylene, Toluene	≥ 500 ppm	-	} No
Ethylene	≥ 1000 ppm	-	
Benzene	≥ 400 ppm	-	

Water vapour is trapped in the white layer of the pretreatment tube.

Other substances measurable with this detector tube

Substance	Correction	No. of pump strokes	Measuring range
1,3-Dichloropropene	Factor : 0.5	2	0.5 to 10 ppm
p-Ethyl benzylchloride	Factor : 2.5	2	2.5 to 50 ppm
Ethyl chloroformate	Factor : 7	2	7 to 140 ppm
2-Methyl allyl chloride	Factor : 2.75	1	2.8 to 55 ppm
Methyl chloroformate	Factor : 58	5	58 to 1160 ppm
Propylene dichloride	Factor : 40	2	40 to 800 ppm
1,2,4-Trichlorobenzene	Factor : 0.65	4	0.65 to 13 ppm

Calibration gas generation

Permeation tube method