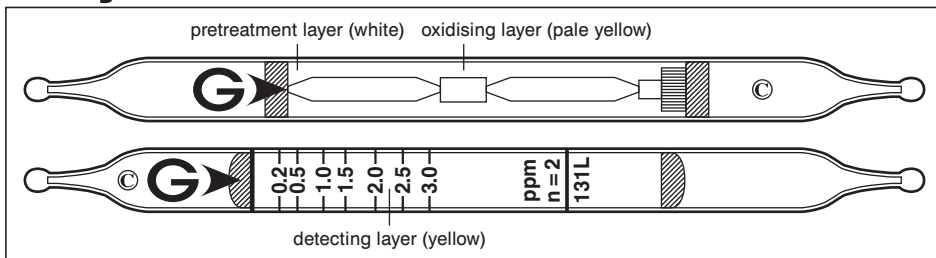


Vinyl Chloride $\text{CH}_2\text{:CHCl}$

No.131L



Performance

When used, these tubes are to be connected.

Measuring range	0.1 to 0.2 ppm	0.2 to 3 ppm	3 to 6.6 ppm
Number of pump strokes	4 (400 ml)	2 (200 ml)	1 (100 ml)
Correction factor	1/2	1	2.2
Sampling time	6 min	3 min	1.5 min

Detecting limit : 0.02 ppm (4 pump strokes)

Colour change : Yellow → Reddish brown

Corrections for temperature & humidity : Temperature correction is necessary.

Relative standard deviation : 10 % (for 0.2 to 1 ppm), 5 % (for 1 to 3 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	$\geq 1/3$	+	} Reddish brown
Trichloroethylene	$\geq 1/5$	+	
Benzene, Toluene	≥ 200 ppm	-	} No
Ethylene	≥ 200 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
Allyl chloride	Factor : 16	2	3.2 to 48 ppm
1,1,2,2-Tetrachloroethane	Factor : 10	2	2 to 30 ppm

Calibration gas generation

Permeation tube method