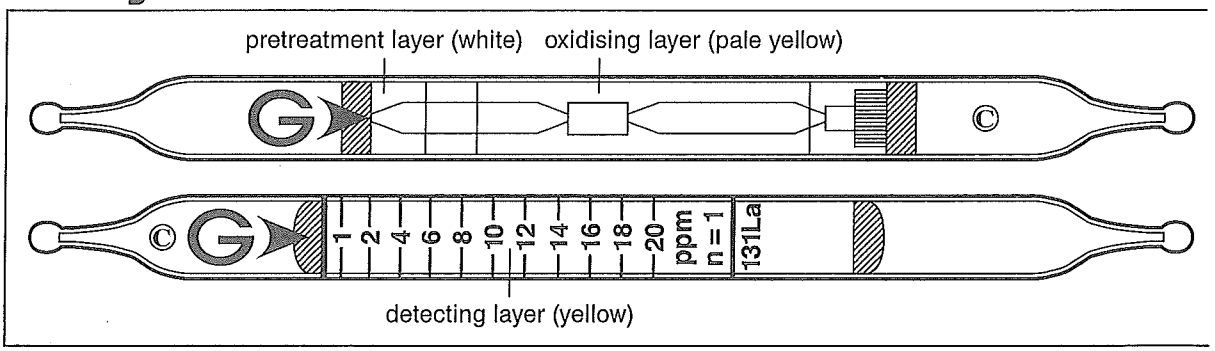
Vinyl Chloride CH_2:CHCl No. 131La



Performance

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

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 : CH_2:CHCl + Cr^{6+} + H_2SO_4 → HCl
Detector tube : HCl + Base → Chloride

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

Substance	Concentration	Interference	Changes colour by itself to
Tetrachloroethylene	≧ 3 times	+	Reddish brown
Trichloroethylene	≧ 1/2	+	Reddish brown
Xylene, Toluene	≧ 500 ppm	−	No
Ethylene	≧ 1000 ppm	−	No
Benzene	≧ 400 ppm	−	No

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 benzylcholoride	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

TLV-TWA : 1 ppm

Explosive range : 3.6 to 23 %