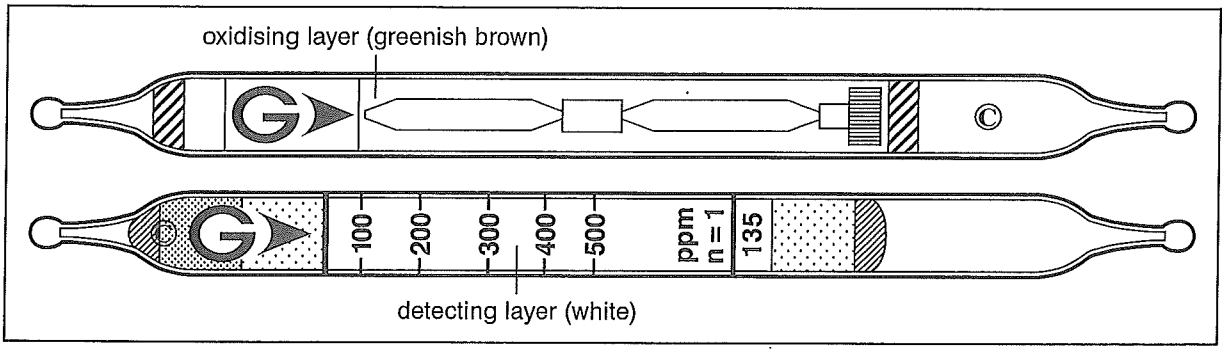
1,1,1-Trichloroethane CH_3CCl_3 No.135



Performance

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

Measuring range	100 to 500 ppm	500 to 2000 ppm
Number of pump strokes	1 (100 ml)	1/2 (50 ml)
Correction factor	1	4
Sampling time	3 min	1.5 min

Detecting limit : 50 ppm (1 pump stroke)
Colour change : White → Reddish orange
Corrections for temperature & humidity : Temperature correction is necessary.
Relative standard deviation : 10 %(for 100 to 200 ppm), 5 %(for 200 to 500 ppm)
Shelf life : 3 years

Reaction principle

1,1,1-Trichloroethane reacts with oxidising agent to produce intermediate products then it react with detecting agent to produce reddish orange stain.

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

Substance	Concentration	Interference	Changes colour by itself to
Chlorine, Bromine, Iodine		+	Reddish orange
Chloroform, Dichloromethane		+	Reddish orange
Carbon tetrachroride		No	No
Methyl bromide		+	Reddish orange
Trichloroethylene, Tetrachloroethylene		+	Reddish orange

Other substances measurable with this detector tube

Substance	Correction	No. of pump strokes	Measuring range
Chlorobromomethane	Factor : 0.22	1	22 to 110 ppm
1,1-Dichloroethane	Factor : 0.9	1	90 to 450 ppm
1,1,2-Trichloroethane	by scale	2	220 to 750 ppm
1,2-Dichloroethane	Factor :4.0	1	400 to 2000 ppm

Calibration gas generation

Diffusion tube method

TLV-TWA : 350 ppm TLV-STEL : 450 ppm