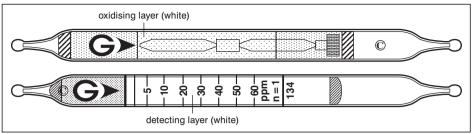
# Carbon Tetrachloride CC14

No.134



When used, these tubes are to be connected.

**Performance** The minimum scale value (2.5ppm) is not printed on the tube, but only the scale line is printed.

Measuring range	0.5 to 2.5 ppm	(2.5) to 60 ppm
Number of pump strokes	2 to 5 (200 to 500 ml)	1 (100 ml)
Correction factor	1/2 to 1/5	1
Sampling time	2 to 5 min	1 min

Detecting limit: 0.2 ppm (5 pump strokes)

Colour change : White → Yellow Corrections for temperature & humidity : Unnecessary

Relative standard deviation: 15 % (for 2.5 to 20 ppm), 10 % (for 20 to 60 ppm)

Shelf life: 1 year (in the refrigerator)

#### Reaction principle

CCl<sub>4</sub> + I<sub>2</sub>O<sub>5</sub> + H<sub>2</sub>S<sub>2</sub>O<sub>7</sub> → COCl<sub>2</sub>

 $\begin{aligned} &\text{COCl}_2 + (\text{ CH}_3)_2 \text{NC}_6 \text{H}_4 \text{CHO} \rightarrow (\text{ CH}_3)_2 \text{NC}_6 \text{H}_4 \text{CHCl}_2 + \text{CO}_2 \\ &(\text{ CH}_3)_2 \text{ NC}_6 \text{H}_4 \text{CHCl}_2 + (\text{ C}_6 \text{H}_5)_2 \text{ NH} \rightarrow \text{Reaction product} \end{aligned}$ 

## Possible coexisting substances and their interferences

Substance	Concentration	Interference	Changes colour by itself to
Bromine, Chlorine	≥ 50 ppm	+	)
Hydrogen chloride	≥ 100 ppm	+	Yellow
Methyl bromide	≥ 100 ppm	+	
1,1,1-Trichloroethane	≥ 100 ppm	+	J
Chloroform		No	]
Methylene chloride		No	
Tetrachloroethylene		No	
Trichloroethane		No	
Vinyl chloride		No	J

### Other substance measurable with this detector tube

Substance	Correction	No. of pump strokes	Measuring range
Chloropicrin	Factor: 1.0	1	2.5 to 60 ppm

#### Calibration gas generation

Diffusion tube method