

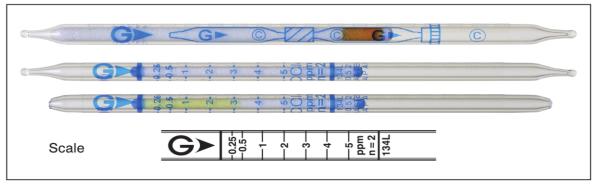


# Carbon Tetrachloride CCl4

Part No.: 134L

# Carbon Tetrachloride CCI4

No.134L



### Performance

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

Measuring range	0.25 to 5 ppm	5 to 11 ppm
Number of pump strokes	2(200 mL)	1(100 mL)
Correction factor	1	2.2
Sampling time	4 min	2 min

Detecting limit: 0.04 ppm (2 pump strokes)

Colour change: White → Yellow

Operating conditions: Temperature 0 to 40 °C (32 to 104 °F) correction not used

Relative humidity 0 to 90 % correction not used

Relative standard deviation: 10 % (for 0.25 to 1 ppm), 5 % (for 1 to 5 ppm)

Tube quantity and number of tests per box: 10 tubes for 5 tests

Shelf life: 12 months (in the refrigerator)

#### Reaction principle

 $CCl_4 + I_2O_5 + H_2S_2O_7 \rightarrow COCl_2$ 

COCl<sub>2</sub> + (CH<sub>3</sub>)<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>CHO  $\rightarrow$  (CH<sub>3</sub>)<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>CHCl<sub>2</sub> + CO<sub>2</sub> (CH<sub>3</sub>)<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>CHCl<sub>2</sub> + (C<sub>6</sub>H<sub>5</sub>)<sub>2</sub>NH  $\rightarrow$  Reaction product

## Possible coexisting substances and their interferences

Substance	Concentration	Interference	Changes colour by itself to
Hydrogen chloride		No	No
Chlorine, Bromine	≥ 3/10	+	No (≤ 0.4 ppm)
Methyl bromide	≥ 2.5 times	+	Pale yellow ( $\geq$ 2.5 ppm)
1,1,1-Trichloroethane	≧ 14 ppm	+	No (≦ 17 ppm)

#### Other substance measurable with this detector tube

Substance	Correction	No. of pump strokes	Measuring range
Chloropicrin	Factor: 1.1	2	0.28 to 5.5 ppm

#### Calibration gas generation

Diffusion tube method