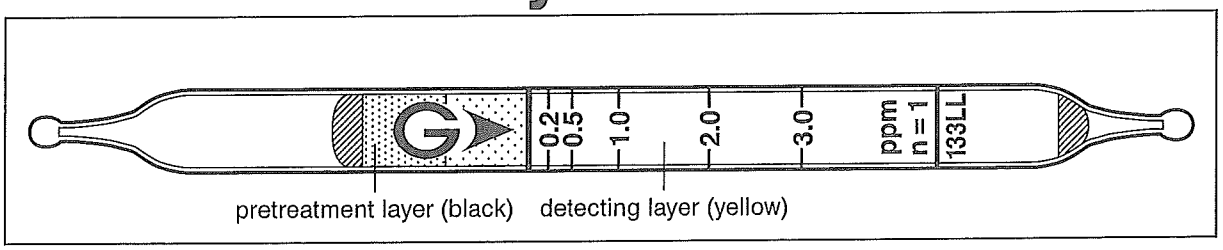
Tetrachloroethylene $Cl_2C{:}CCl_2$ No.133LL



Performance

Measuring range	0.1 to 0.2 ppm	0.2 to 3 ppm	3 to 9 ppm
Number of pump strokes	2 (200 ml)	1 (100 ml)	1/2 (50 ml)
Correction factor	1/2	1	3
Sampling time	3 min	1.5 min	45 sec

Detecting limit : 0.05 ppm (2 pump strokes)
Colour change : Yellow → Purple
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

$Cl_2C{:}CCl_2 + PbO_2 + H_2SO_4 \rightarrow HCl$
$HCl + Base \rightarrow Chloride$

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

Substance	Concentration	Interference	Changes colour by itself to
Chlorine	≧ 1/2	+	Purple
Hydrogen chloride	≧ 1/2	+	
1,2-Dichloroethylene		+	
1,1,1-Trichloroethane	≦ 80 ppm	No	No (≦ 80 ppm)
Toluene, Xylene		No	No

Calibration gas generation

Diffusion tube method

Special note

This detector tube can also be used with the Gastec Water Pollutant Analysis Systems to measure tetrachloroethylene in the water. With these systems, samples are collected by using a syringe. For detail, see page 5-9.

TLV-TWA : 25 ppm TLV-STEL : 100 ppm Explosive range : 10.8 to 54.5 % (in oxygen)