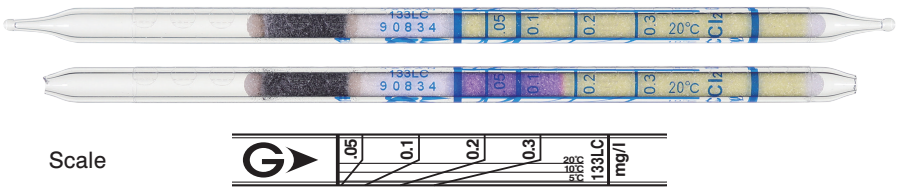
Head space method

Tetrachloroethylene $Cl_2C:CCl_2$ No.133LC



Performance

Measuring range	0.05 to 0.3 mg/L
Number of pump strokes	1（100 mL）
Correction factor	1
Sampling time	45 sec

Detecting limit : 0.01 mg/L（1 pump stroke）
Colour change : Yellow → Bluish purple
Operating conditions : Temperature 0 to 40 °C (32 to 104 °F) correction used
Water temperature 0 to 30 °C (32 to 86 °F) correction used
Relative standard deviation : 10 %(for 0.05 to 0.1 mg/L), 5 %(for 0.1 to 0.3 mg/L)
Tube quantity and number of tests per box : 10 tubes for 10 tests
Shelf life : 30 months（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

Substance	Concentration	Interference	Changes colour by itself to
1,1,1-Trichloroethane	≦ 100 ppm	No	No
1,2-Dichloroethylene		+	Bluish purple
Trichloroethylene		+	Bluish purple
Toluene, Xylene		No	No
Hydrogen chloride, Chlorine	≧ 1/2	+	Bluish purple

Calibration gas generation

Diffusion tube method