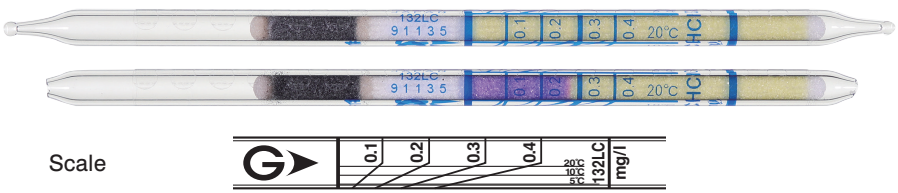
Head space method

# Trichloroethylene $Cl_2C:CHCl$ No.132LC




Scale




## Performance

| | |
|---|---|
| Measuring range | 0.1 to 0.4 mg/L |
| Number of pump strokes | 1 (100 mL) |
| Correction factor | 1 |
| Sampling time | 1 min |

Detecting limit : 0.02 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 0.1 to 0.2 mg/L), 5 %(for 0.2 to 0.4 mg/L)
Tube quantity and number of tests per box : 10 tubes for 10 tests
Shelf life : 30 months (in the refrigerator)

## Reaction principle

$Cl_2C:CHCl + PbO_2 + H_2SO_4 \rightarrow HCl$
$HCl$ + Base → 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-Dichloroethene | | + | Bluish purple |
| Tetrachloroethylene | | + | Bluish purple |
| Toluene, Xylene | | No | No |
| Hydrogen chloride, Chlorine | ≧ 1/2 | + | Bluish purple |

## Calibration gas generation

Diffusion tube method