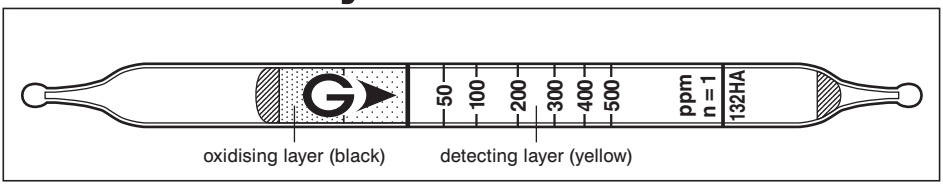
Trichloroethylene $Cl_2C{:}CHCl$ No.132HA



Performance

Measuring range	20 to 50 ppm	50 to 500 ppm	500 to 1300 ppm
Number of pump strokes	2 (200 ml)	1 (100 ml)	1/2 (50 ml)
Correction factor	0.4	1	2.6
Sampling time	1.5 min	45 sec	30 sec

Detecting limit : 4 ppm (2 pump strokes)
Colour change : Yellow → Reddish purple
Corrections for temperature & humidity : Temperature correction is necessary.
Relative standard deviation : 10 %(for 50 to 100 ppm), 5 %(for 100 to 500 ppm)
Shelf life : 2 years (in the refrigerator)

Reaction principle

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

Possible coexisting substances and their interferences

Substance	Concentration	Interference	Changes colour by itself to
Bromine, Chlorine		+	Reddish purple
Hydrogen chloride		+	
Unsaturated halogenated hydrocarbons		+	
Acetone	≦ 200 ppm	No	No
Aromatic hydrocarbons	≧ 100 ppm	−	
Nitric oxide		No	
Nitrogen dioxide		No	
1,1,1-Trichloroethane			Reddish purple(≧ 3000 ppm)

Other substances measurable with this detector tube

Substance	Correction	No. of pump strokes	Measuring range
1,2-Dichloroethylene	Factor : 1.6	1	80 to 800 ppm
1,3-Dichloropropene	Factor : 0.9	2	45 to 450 ppm

Calibration gas generation

Diffusion tube method