

Performance

Measuring Range	0.125 to 0.25ppm	0.25 to 4.0ppm	4.0 to 8.8ppm	
Number of Pump Strokes	2	1	1/2	
Correction Factor	1/2	1	2.2	
Sampling Time	1.5 minutes per pump stroke			
Detecting Limit	0.05 ppm (n=2)			
Colour Change	Yellow—▶ Purple			
Reaction Principle	Trichloroethylene is decomposed by nascent oxygen by oxidizing agent to liberate hydrogen chloride which discolours indicator to reddish purple. Cl₂C:CHCl + PbO₂ + H₂SO₄ → HCl HCl + Basic Compound ← Chloride			
Coefficient of Variation	10% (for 0.25 to 1 ppm), 5% (for 1 to 4 ppm)			
Shelf Life	2 Years			
Corrections for temperature & humidity	Temperature correction is necessary			
Store the tubes in the refrigerator to keep at 10°C (50°F) or below.				

Possible coexisting substances and their interferences

Substance	Concentration	Interference	Change colour by itself		
Hydrogen chloride, Chlorine, Bromine	≥1/2 time	Plus error	Produce bluish purple stain		
Tetrachloroethylene	<u>≥</u> 1/2 time	Plus error	Produce bluish purple stain		
1,1,1-Trichloroethane	<u>≤</u> 80 ppm or less	No effect	No discoloration up to <u>≤</u> 80 ppm		
Toluene, Xylene	-	No effect	No discoloration		

Other substance measurable with this detector tube

Substance	Correction Factor	Pump Strokes	Measuring Range
1,2-Dichloroethylene	1.5	1	0.375 to 6 ppm

Calibration gas generation Diffusion tube method

TLV-TWA	TLV-STEL	Explosive range
10ppm	25ppm	-