

**Performance**

<b>Measuring Range</b>	1 to 2ppm	2 to 25ppm	25 to 70ppm
<b>Number of Pump Strokes</b>	2	1	1/2
<b>Correction Factor</b>	1/2	1	2.8
<b>Sampling Time</b>	1 minute per pump stroke		
<b>Detecting Limit</b>	0.4 ppm (n=2)		
<b>Colour Change</b>	Yellow → Purple		
<b>Reaction Principle</b>	Trichloroethylene is decomposed by nascent oxygen by oxidizing agent to liberate hydrogen chloride which discolours indicator to reddish purple. $\text{Cl}_2\text{C:CHCl} + \text{PbO}_2 + \text{H}_2\text{SO}_4 \longrightarrow \text{HCl}$ $\text{HCl} + \text{Basic Compound} \longrightarrow \text{Chloride}$		
<b>Coefficient of Variation</b>	10% (for 2 to 5 ppm), 5% (for 5 to 25 ppm)		
<b>Shelf Life</b>	2 Years		
<b>Corrections for temperature &amp; humidity</b>	Temperature correction is necessary		
<b>Store the tubes in the refrigerator to keep at 10°C (50°F) or below.</b>			

**Possible coexisting substances and their interferences**

Substance	Concentration	Interference	Change colour by itself
Nitric Oxide, Nitrogen dioxide	-	No effect	No discoloration
Hydrogen chloride, Chlorine, Bromine	-	Plus error	Produce purple stain
Acetone	≤200 ppm	No effect	No discoloration
Unsaturated Halogenated Hydrocarbons	-	Plus error	Produces reddish purple stain
Aromatic hydrocarbons	≥100 ppm	Minus error	No discoloration

**Other substance measurable with this detector tube**

Substance	Correction Factor	Pump Strokes	Measuring Range
Benzyl chloride	0.8	2	1.6 to 20 ppm

**Calibration gas generation** Diffusion tube method

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