

**Performance**

Measuring Range	2.5 to 5 ppm	5 to 100 ppm
Number of Pump Strokes	8	4
Correction Factor	1/2	1
Sampling Time	3 minutes per pump stroke	
Detecting Limit	0.5 ppm (n=8)	
Colour Change	Pale yellow → White	
Reaction Principle	1,3-Butadiene reacts with palladium sulphate and ammonium molybdate to produce white compound. $\text{CH}_2:\text{CHCH}:\text{CH}_2 + (\text{NH}_4)_2\text{MoO}_4 + \text{PdSO}_4 \longrightarrow \text{White product}$	
Coefficient of Variation	10% (for 5 to 20 ppm), 5% (for 20 to 100 ppm)	
Shelf Life	3 Years	
Corrections for temperature & humidity	Temperature correction is unnecessary	

Store the tubes at cool and dark place.

Possible coexisting substances and their interferences

Substance	Concentration	Interference	Change colour by itself
Acetylene, Hydrogen cyanide	-	Plus error	Discolours to white
Carbon monoxide, Hydrogen	-	Plus error	Discolours to blue for whole layer
Hydrogen chloride	-	Plus error	Discolours to pink stain
Hydrogen sulphide	-	Plus error	Discolours to black
Ethylene, Propylene, Butylene	-	Plus error	Discolours to blue
Butane, Pentane	-	Plus error	Discolours to blue for whole layer

Other substance measurable with this detector tube

Substance	Correction Factor	Pump Strokes	Measuring Range
1,3-Pentadiene	8.5	4	42.5 to 850 ppm

Calibration gas generation Permeation tube method

TLV-TWA	TLV-STEL	Explosive range
2ppm	-	2.0 to 12.0 %