

Performance

Measuring Range	0.25 to 2.5 ppm	2.5 to 70 ppm	70 to 140 ppm	
measuring range	0.20 to 2.0 ppm	2.0 to 70 ppm	70 to 140 ppin	
Number of Pump Strokes	2 to 10	1	1/2	
Correction Factor	1/2 to 1/10	1	2	
Sampling Time	2 minutes per pump stroke			
Detecting Limit	0.1 ppm (n=10)			
Colour Change	White ─►Yellow			
Reaction Principle	$2CH_3SH + PdSO_4 \longrightarrow (CH_3S)_2 Pd + H_2SO_4$			
Coefficient of Variation	10% (for 2.5 to 20 ppm), 5% (for 20 to 70 ppm)			
Shelf Life	3 Years			
Corrections for temperature & humidity	Temperature correction is necessary			
Store the tubes at cool and dark place.				

Possible coexisting substances and their interferences

Substance	Concentration	Interference	Change colour by itself
Acetylene, Ethylene	<u>≤</u> 2000 ppm	No (two layers)	Discolour pale brown to whole layer
Carbon Monoxide	<u>≤</u> 2000 ppm	No (two layers)	Discolour pale brown to whole layer
Other Mercaptans	-	Plus error	Discolour yellow stain
Hydrogen Sulfide	<u>≤</u> 500 ppm	No effect	No stain

Calibration gas generation Permeation tube method

TLV-TWA	TLV-STEL	Explosive range
0.5ppm	-	3.9 to 21.8%