Uniphos Detector Tube Data Sheet

Direct Reading Length of Stain Type

Hydrogen Sulfide in Natural Gas SHS-1HNG

TLV (TWA): 1 ppm TLV (STEL): 5 ppm Flammable Range: 4-44%

Specification:

Measurement Range	Extended	Standard	Extended
	0.25 - 0.5 ppm	0.5 - 7 ppm	7- 14 ppm
No. of Pump Strokes	2 (200 mL)	1 (100 mL)	1/2 (50 mL)
Volume Correction Factor (VCF)*	0.5	1.0	2.0
Sampling Time	2.0 minutes per pump stroke (100 mL)		
Color Change	Yellow → Pink		
Shelf Life	1 year		
Storage condition	Below 10°C (50°F)		
Calibration condition	Calibrated at 20°C (68°F) and 50% RH in air.		
Reaction Principle	$H_2S + HgCl_2 \rightarrow HCl + HSHgCl$		
	HCl + Base → Chloride		
Relative standard deviation	± 10 – 15 %		

^{*} Multiply the observed reading by the correction factor (VCF) to obtain the true concentration.

Possible Interferences:

Compound	Concentration (ppm)	Interference	Colour change / Comments
Hydrogen sulphide in Air		+	Pink
Ammonia	100	No	No effect
Nitrogen dioxide	3	No	No effect
Sulphur dioxide	20	No	No effect
Mercaptan		+	Pink

Correction for Environmental Parameters:

Temperature	Not necessary between 0 - 40°C (32 - 104°F).
Relative humidity	Tubes are calibrated at ≤ 5% RH. Reading drops sharply above 5 % RH.