

Uniphos Detector Tube Data Sheet

Direct Reading Length of Stain Type

Hydrogen Sulfide

H₂S

SHS-1H

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	4 (400 mL)	2 (200 mL)	1 (100 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 ₂ S + HgCl ₂ → 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 natural gas		+	Pink
Ammonia	100	No	No effect
Nitrogen dioxide	5	No	No effect
Sulphur dioxide	30	No	No effect
Mercaptan		+	Pink

Correction for Environmental Parameters:

Temperature - Not necessary between 0 - 40°C (32 - 104°F).

Relative Humidity (%RH) :	<10	30	50	70	90
Humidity Correction Factor at 20°C (HCF) *:	0.7	1.0	1.0	1.15	1.3

* Multiply the observed reading by the correction factor (VCFXHCF) to obtain the true concentration.



Manufactured By: Uniphos Envirotronic Pvt. Ltd.
Nahuli (PO), Umbergaon (Tal.)
Valsad (Dist), Gujarat, India – 396108

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