

# Uniphos Detector Tube Data Sheet

Direct Reading Length of Stain Type

## Phosphine



## SPH-1L

TWA (TLV): 0.3 ppm

STEL (TLV): 1 ppm

Flammable Range: ~1.8 - 100%

### Specification:

Measurement Range	Extended	Standard	Extended
	Do not extend	0.05 – 2.5 ppm	0.1 – 5 ppm
No. of Pump Strokes		2 (200 mL)	1 (100 mL)
Volume Correction Factor (VCF)*		1.0	2.0
Sampling Time	2.0 minutes per pump stroke (100 mL)		
Color Change	Yellow → Pink		
Shelf Life	2 years		
Storage condition	Below 10°C (50°F)		
Calibration condition	Calibrated at 20°C (68°F) and 50% RH.		
Reaction Principle	$\text{PH}_3 + 3\text{HgCl}_2 \rightarrow \text{P}(\text{HgCl})_3 + 3\text{HCl}$ $\text{HCl} + \text{Base} \rightarrow \text{Chloride}$		
Relative standard deviation	± 10 %		

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

### Possible Interferences:

Compound	Concentration (ppm)	Interference	Colour change / Comments
Arsine		+	Yellow to Pink
SO <sub>2</sub>	200	No	No Effect
H <sub>2</sub> S		+	Yellow to Pink

### Correction for Environmental Parameters:

Temperature	Not necessary between 0 - 40°C (32 - 104°F).
Relative humidity	Not necessary between 10 - 90 %.



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

Rev.0812