

Uniphos Detector Tube Data Sheet

Direct Reading Length of Stain Type

Phosphine



SPH-1

TWA (TLV): 0.3 ppm

STEL (TLV): 1 ppm

Flammable Range: ~1.8 - 100%

Specification:

	Extended	Standard	Extended
Measurement Range	0.05 – 5 ppm	0.1–10 ppm	0.2 – 20 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	1.5 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 ₂	20	No	No Effect
H ₂ 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.
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