

Uniphos Detector Tube Data Sheet

Direct Reading Length of Stain Type

Methyl Mercaptan CH_3SH SMM-4L

TWA (TLV): 0.5 ppm

STEL (TLV): NA

Flammable Range: 4-22%

Specification:

Measurement Range	Extended	Standard	Extended
	2.5 - 60 ppm	5 - 120 ppm	10 - 240 ppm
No. of Pump Strokes	2 (200 mL)	1 (100 mL)	0.5 (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	1 year		
Storage condition	Below 10°C (50°F)		
Calibration condition	Calibrated at 20°C (68°F) and 50% RH.		
Reaction Principle	$\text{CH}_3\text{SH} + \text{HgCl}_2 \rightarrow \text{CH}_3\text{S.HgCl} + \text{HCl}$ $\text{HCl} + \text{Base} \rightarrow \text{Chloride}$		
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
Other Mercaptans		+	Yellow to Pink
PH_3		+	Yellow to Pink
H_2S		+	Yellow to Pink
Arsine		+	Yellow to Pink
HCN		+	Yellow to Pink
CO_2	10%	No	No effect
NH_3	100	No	No effect
SO_2	30	No	No effect

Other Measurable Compounds:

Compound	Correction Factor	No. of pump strokes	Measuring range
Ethyl Mercaptan	1	1	5 - 120 ppm
t-Butyl Mercaptan	1	1	5 - 120 ppm

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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