

# Uniphos Detector Tube Data Sheet

Direct Reading Length of Stain Type

## Methyl Mercaptan $\text{CH}_3\text{SH}$ SMM-2M

TWA (TLV): 0.5 ppm

STEL (TLV): NA

Flammable Range: 4-22%

### Specification:

	Extended	Standard	Extended
Measurement Range	0.5 - 10 ppm	1 - 20 ppm	2 - 40 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
$\text{PH}_3$		+	Yellow to Pink
$\text{H}_2\text{S}$		+	Yellow to Pink
Arsine		+	Yellow to Pink
HCN		+	Yellow to Pink
$\text{NH}_3$	100	No	No effect
$\text{SO}_2$	30	No	No effect

### Other Measurable Compounds:

Compound	Correction Factor	No. of pump strokes	Measuring range
Ethyl Mercaptan	1	1	1 - 20 ppm
t-Butyl Mercaptan	1	1	1 - 20 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.  
Nahuli (PO), Umbergaon (Tal.)  
Valsad (Dist), Gujarat, India – 396108

Rev.0812