Uniphos Detector Tube Data Sheet

Direct Reading Length of Stain Type

t-Butyl Mercaptan C₄H₉SH

SBM-1

TWA (TLV): 0.5 ppm STEL (TLV): NA Flammable Range: NA

Specification:

Measurement Range	Extended	Standard	Extended
	Do not extend	0.13-8 ppm	Do not extend
No. of Pump Strokes		2 (200 mL)	
Volume Correction Factor (VCF)*		1.0	
Sampling Time	1 minute 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% F	RH.
Reaction Principle	$C_4H_9SH + HgCl_2 \rightarrow CH_3S.HgCl + HCl$		
	HCI + Base → 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 Mercaptan		Positive	Yellow to Pink
PH ₃		Positive	Yellow to Pink
H₂S		Positive	Yellow to Pink
NH ₃	15	No	No effect
SO ₂	30	No	No effect
CO ₂	100	No	No effect

Other measurable compounds:

Compound	Correction Factor	No. of pump strokes	Measuring range
Ethyl Mercaptan	1	2	0.13-8 ppm
Methyl Mercaptan	1	2	0.13-8 ppm

Correction for Environmental Parameters:

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