Uniphos Detector Tube Data Sheet

Direct Reading Length of Stain Type

Ethylene Oxide

C₂H₄O

SFO-1

TLV (STEL): ----TLV (TWA): 1 ppm Flammable Range: 4-100%

Specification:

Measurement Range	Extended	Standard	Extended
	Do not extend	0.1 – 10 ppm	Do not extend
No. of Pump Strokes		4 (400 mL)	
Volume Correction Factor (VCF)*		1.0	
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) in Refrigerator		
Calibration condition	Calibrated at 20°C (68°F) and 50% RH.		
	C_2H_4O + Oxidizer \rightarrow HCHO (Pre-Treatment Tube)		
Reaction Principle (Double Tube)	$HCHO + (NH2OH)3.H3PO4 \rightarrow H3PO4$		
	H ₃ PO ₄ + Base → Phosphate (Detector Tube)		
Relative standard deviation	± 10 – 15 %		

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

Possible Interferences:

Compound	Concentration (ppm)	Interference	Colour change / Comments
Aldehydes		+	Pink
Ketones		+	Pink

Correction for Environmental Parameters:

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