# **Uniphos Detector Tube Data Sheet**

Direct Reading Length of Stain Type

# **Ethylene Oxide**

C<sub>2</sub>H<sub>4</sub>O

**SEO-7** 

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

### Specification:

Management Dance	Extended	Standard	Extended
Measurement Range	0.025-0.05%	0.05-3.0%	3.0-6.0%
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	2.0 minutes per pump stroke (100 mL)		
Color Change	Orange → Brownish Green		
Shelf Life	2 years		
Storage condition	Below 10°C (50°F)		
Calibration condition	Calibrated at 20°C (68°F) and 50% RH.		
Reaction Principle	$C_2H_4O$ + $Cr^{6+}$ + $H_2SO_4 \rightarrow Cr^{3+}$		
Relative standard deviation	± 10 – 15 %		

<sup>\*</sup> Multiply the observed reading by the correction factor (VCF) to obtain the true concentration.

#### Possible Interferences:

Compound	Concentration (ppm)	Interference	Colour change / Comments
Alcohols		+	Brownish Green
Esters		+	Brownish Green
Ketones		+	Brownish Green
Aromatic Hydrocarbons		+	Brownish Green

#### OTHER MEASURABLE COMPOUNDS:

Compound	Correction Factor	No. of pump strokes	Measuring range
1,4 Dioxane	1.3	1	0.07 – 4.0 %

## **Correction for Environmental Parameters:**

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