Uniphos Detector Tube Data Sheet

Direct Reading Length of Stain Type

Nitric Acid

HNO₃

SNA-2M

TLV (TWA): 2 ppm

TLV (Ceiling): 4 ppm

Flammable Range: NA %

Specification:

Management Danage	Extended	Standard	Extended		
Measurement Range	0.5 – 1 ppm	1 – 20 ppm	20 – 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 minute per pump stroke (100 mL)				
Color Change	Greenish yellow \rightarrow Purple				
Shelf Life	1 year				
Storage condition	Below 10°C (50°F)				
Calibration condition	Calibrated at 20°C (68°F) and 10 mg/l				
Reaction Principle	HNO_3 + Base \rightarrow Reaction product				
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
Hydrogen chloride		+	Purple
Chlorine		+	Purple
Carbon monoxide	10	No	No Effect
Nitrogen dioxide	10	No	No Effect
Methanol	100	No	No Effect

Other Measurable Compounds:

Compound	Gas Correction factor (GCF)*	No. of pump strokes	Measuring range
Hydrogen Bromide	0.8	1	0.8-16 ppm

* Multiply the observed reading by the correction factor (VCF x GCF) to obtain the true concentration.

Correction for Environmental Parameters:

Temperature - Not necessary between 0 - 40°C (32 - 104°F).

Relative Humidity (mg/l):	6	8	10	12	16
Correction Factor (HCF)*:	0.6	0.8	1.0	1.2	1.4

* Multiply the observed reading by the correction factors (VCFxHCF) to obtain the true concentration.

