Uniphos Detector Tube Data Sheet

Direct Reading Length of Stain Type

Ammonia

NH₃

SAM-4M

TLV (TWA): 25 ppm TLV(STEL): 35 ppm Flammable Range: 15-28%

Specification:

Measurement Range	Extended	Standard	Extended
	5 - 10 ppm	10 - 300 ppm	300 - 600 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	Yellow → Blue		
Shelf Life	2 years		
Storage condition	Below 10°C (50°F)		
Calibration condition	Calibrated at 20°C (68°F) and 50% RH.		
Reaction Principle	NH ₃ + Acid → Reaction product		
Relative standard deviation	± 10 to 15 %		

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

Possible Interferences:

Compound	Concentration (ppm)	Interference	Colour change / Comments
Amines		+	Blue
Hydrazine		+	Blue
Carbon dioxide	5%	No	No Effect

Other Measurable Compounds:

Compound	Gas Correction factor (GCF)*	No of pump strokes	Measuring Range / Comments
n-Butyl amine	1	1	10 - 300 ppm
Diethyl amine	0.6	1	6 - 180 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	Not necessary between 10 - 90 %.