Uniphos Detector Tube Data Sheet

Direct Reading Length of Stain Type

Amines

(As CH₃NH₂)

SMA-3

TLV (STEL): 15 ppm TLV (TWA): 5 ppm Flammable Range: 5-21%

Specification:

Management Dance	Extended	Standard	Extended		
Measurement Range	2.5-5 ppm	5-100 ppm	100-200 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	1 year				
Storage condition	Below 10°C (50°F)				
Calibration condition	Calibrated at 20°C (68°F) and 50% RH.				
Reaction Principle	CH ₃ NH ₂ + Acid → Reaction product				
Relative standard deviation	± 10 to 15 %				

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

Possible Measurable Substances:

Compound	No. of stroke	Gas Correction Factor GCF*	Measuring Range (ppm)	TLV (ppm)	Colour Change
Methylamine	1	1.0	5 – 100	5	Blue
Ethylamine	1	0.9	4.5 – 90	5	Blue
n-Butylamine	1	1.0	5 – 100	C5	Blue
Trimethylamine	1	0.38	1.9 – 38	5	Light green
Triethylamine	1	0.67	3.35 – 67	1	Blue
Isopropylamine	1	0.8	4 – 80	5	Blue
Ammonia	1	1.0	5 – 100	25	Blue
Diethylamine	1	0.77	3.85 – 77	5	Blue
Cyclohexylamine	1	1.32	6.6 – 132	10	Blue
Ethanolamine	3	3.7	18.5 - 370	3	Blue
tert -Butylamine	1	0.78	3.9 – 78	NA	Blue
Morpholine	1	2.0	10 – 200	20	Blue

^{*} 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 %.