

Specification:

	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 → Purple			
Detection Limit	0.2 ppm (2 pump strokes)			
Shelf Life	2 years			
Relative standard deviation	± 10 – 15 %			

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

Reaction Principle:

HNO₃ + Base → Reaction product

Possible Interferences:

Compound	Concentration (ppm)	Interference	Color Change / Comments		
Hydrogen chloride		+	Purple		
Chlorine		+	Purple		
Carbon monoxide	≤10	No	No Effect		
Nitrogen dioxide	≤10	No	No Effect		
Methanol	≤100	No	No Effect		

Cross Sensitivity:

Compound	No. of strokes	Gas Correction Factor (GCF)*	Measuring range (ppm)	TLV (ppm)	Colour change
Hydrogen Bromide	1	1.0	1 – 20 ppm	2 (C)	Purple

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

Correction For Environmental Parameters:

Temperature	Not necessary between 0 - 40°C (32 - 104°F).				
Absolute 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 factor (VCFXHCF) to obtain the true concentration.

Calibration Of The Tube:

Static gas dilution method.

TLV (TWA): 2 ppm TLV (C): 4 ppm Flammable Range: NA