

**Performance**

Measuring Range	0.1 to 1 ppm	1 to 20 ppm	20 to 40 ppm
Number of Pump Strokes	2 to 10	1	1/2
Correction Factor	1/2 to 1/10	1	2
Sampling Time	45 seconds per pump stroke		
Detecting Limit	0.05 ppm (n=10)		
Colour Change	Yellow → Reddish purple		
Reaction Principle	Nitric acid reacts with indicator to produce purple stain. HNO <sub>3</sub> + Indicator → Chemical reaction product		
Coefficient of Variation	15% (for 1 to 5 ppm), 10% (for 5 to 20 ppm)		
Shelf Life	3 Years		
Corrections for temperature & humidity	Humidity correction is necessary		
Store the tubes at cool and dark place.			

**Possible coexisting substances and their interferences**

Substance	Concentration	Interference	Change colour by itself
Hydrogen chloride	≥1/10 time	Plus error	Produces reddish purple stain
Chlorine	-	No effect	Bleaches the discoloration
Carbon monoxide	-	No effect	No discoloration
Nitrogen dioxide	-	No effect	No discoloration
Organic solvents	-	No effect	No discoloration

**Other substance measurable with this detector tube**

Substance	Correction	Pump Strokes	Measuring Range
Hydrogen bromide	0.8	1	0.8 to 16 ppm
Trichloroacetic acid	by scale	1	1 to 37.5 ppm

**Calibration gas generation** High pressure gas cylinder method

TLV-TWA	TLV-STEL	Explosive range
2ppm	4ppm	-