

**Performance**

Measuring Range	0.04 to 1.0%
Number of Pump Strokes	1
Correction Factor	1
Sampling Time	2 minutes per pump stroke
Detecting Limit	0.001% (n=1)
Colour Change	Orange → Dark green
Reaction Principle	Ethyl ether reacts with chromic acid to form chromic sulphate, which produces a greenish brown colour. $(C_2H_5)_2O + Cr^{6+} + H_2SO_4 \rightarrow Cr^{3+}$
Coefficient of Variation	10% (for 0.04 to 0.2 %), 5% (for 0.2 to 1.0 %)
Shelf Life	3 Years
Corrections for temperature & humidity	Temperature correction is necessary
Store the tubes at cool and dark place.	

Possible coexisting substances and their interferences

Substance	Concentration	Interference	Change colour by itself
Propane	≥0.2%	Plus error	Produce dark green for whole layer
Alcohols, Esters, Ketones	-	Plus error	Produces dark green stain
Aromatic Hydrocarbons	≥500 ppm	Plus error	Produces dark green stain
Hydrogen sulphide	≥500 ppm	Plus error	Produces green stain
Sulphur dioxide	≥500 ppm	Plus error	Produces green stain
Acetylene	≥0.3%	Plus error	Produce dark green for whole layer

Other substance measurable with this detector tube

Substance	Correction Factor	Pump Strokes	Measuring Range
Isopropyl ether	0.45	2	0.018 to 0.45%
Methyl ether	0.85	1	0.03 to 0.85%
Tetrahydrofuran	1.4	1	0.056 to 1.4%
Toluene	by scale	1	0.02 to 0.8%

Calibration gas generation Static gas dilution method

TLV-TWA	TLV-STEL	Explosive range
400ppm	500ppm	1.9 to 36%