

**Performance**

Measuring Range	0.015 to 0.03%	0.03 to 0.6%	0.6 to 1.2%
Number of Pump Strokes	2	1	1/2
Correction Factor	1/2	1	2
Sampling Time	1 minute per pump stroke		
Detecting Limit	0.003% (n=2)		
Colour Change	Orange → Dark green		
Reaction Principle	Gasoline reduces potassium dichromate to form chromic sulphate, which is dark green in colour $C_nH_m + Cr^{6+} + H_2SO_4 \longrightarrow Cr^{3+}$		
Coefficient of Variation	10% (for 0.03 to 0.1 %), 5% (for 0.1 to 0.6 %)		
Shelf Life	3 Years		
Corrections for temperature & humidity	Unnecessary		
Store the tubes at cool and dark place.			

Possible coexisting substances and their interferences

Substance	Concentration	Interference	Change colour by itself
Acetylene	≥3%	Plus error	Produces dark brown to whole layer
Propane	≥0.2%	Plus error	Produces dark brown to whole layer
Aromatic hydrocarbons	≥500 ppm	Plus error	Produces dark green stain
Alcohols, Esters, Ethers	-	Plus error	Produces dark green stain
Halogenated hydrocarbons	≥5000 ppm	Plus error	Produces dark green stain
Hydrogen sulphide	≥500 ppm	Plus error	Produces dark green stain
Sulphur dioxide	≥500 ppm	Plus error	Produces green stain

Other substance measurable with this detector tube

Substance	Correction	No. of Pump Strokes	Measuring Range
Heptane	Factor: 1.0	1/2, 1 or 2	0.015 to 1.2%
Isooctane	Factor: 0.9	1	0.027 to 0.54%
Octane	Factor: 1.2	1	0.036 to 0.72%

Calibration gas generation Static gas dilution method

TLV-TWA	TLV-STEL	Explosive range
300ppm	500ppm	1.4 to 7.6%