

Specification:

	Extended	Standard	Extended
Measurement Range (SO2)	Do not extend	100 - 5000 ppm	Do not extend
No. of Pump Strokes		1 (100 ml)	
Volume Correction Factor (VCF)*		1.0	
Sampling Time	1 minutes per pump stroke (100 ml)		
Color Change	Brown → Pale green		
Detection Limit	50 ppm (1 pump strok	e)	
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:

 $C_4H_{10} + Cr^{6+} + H_2SO_4 \rightarrow Cr^{3+}$

Possible Interferences:

Compound	Concentration (ppm)	Interference	Color Change / Comments
Esters, ketone	≥ 2000 ppm	+	Pale green
Hydrocarbons (≥C3)		+	Pale green
Propylene		+	Pale green
Xylene		+	Pale green

Cross Sensitivity:

Compound	No. of strokes	Gas Correction Factor (GCF)*	Measuring range (ppm)	TLV (ppm)	Colour change
Butadiene	1	1.5	150 – 7500 ppm	2	Pale Green

^{*} Multiply the observed reading by the correction factor (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 %.

Calibration Of The Tube:

Static gas dilution method.

TLV (TWA): --- Flammable Range: 1.6 – 10 %