


**Performance**

<b>Measuring Range</b>	0.02 to 0.6%
<b>Number of Pump Strokes</b>	2
<b>Correction Factor</b>	1
<b>Sampling Time</b>	2 minutes per pump stroke
<b>Detecting Limit</b>	0.002% (n=2)
<b>Colour Change</b>	Orange → Dark green
<b>Reaction Principle</b>	Methyl ethyl ketone reacts with potassium dichromate to form chromic sulphate, which produces a green colour. $\text{CH}_3\text{COC}_2\text{H}_5 + \text{Cr}^{6+} + \text{H}_2\text{SO}_4 \longrightarrow \text{Cr}^{3+}$
<b>Coefficient of Variation</b>	10% (for 0.02 to 0.2 %), 5% (for 0.2 to 0.6 %)
<b>Shelf Life</b>	3 Years
<b>Corrections for temperature &amp; humidity</b>	Temperature correction is necessary
<b>Store the tubes at cool and dark place.</b>	

**Possible coexisting substances and their interferences**

Substance	Concentration	Interference	Change colour by itself
Sulphur dioxide	≥500 ppm	Plus error	Produces green stain
Hydrogen sulphide	≥500 ppm	Plus error	Produces dark green
Alcohols, Esters, Ketones	-	Plus error	Produces dark green
Propane	≥2000 ppm	Yes	Produces dark green for whole layer 2000 ppm
Aromatic Hydrocarbons	≥500 ppm	Plus error	Produces dark green

**Calibration gas generation** Static gas dilution method

TLV-TWA	TLV-STEL	Explosive range
200ppm	300ppm	1.7 to 11.4%