

**Performance**

| | | |
|---|--|------------------|
| Measuring Range | 30 to 1000 ppm | 1000 to 2000 ppm |
| Number of Pump Strokes | 2 | 1 |
| Correction Factor | 1 | 2 |
| Sampling Time | 2 minutes per pump stroke | |
| Detecting Limit | 5 ppm (n=2) | |
| Colour Change | Orange → Dark green | |
| Reaction Principle | Propylene reduces potassium dichromate to form chromic sulfate, which is dark green in colour $C_nH_m + Cr^6 + H_2SO_4 \rightarrow Cr^{3+}$ | |
| Coefficient of Variation | 10% (for 30 to 300 ppm), 5% (for 300 to 1000 ppm) | |
| 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 |
|--------------------------|---------------|--------------|-------------------------|
| Hydrogen sulphide | - | Plus error | Dark brown |
| Acetylene | - | Plus error | Dark brown |
| Aromatic hydrocarbons | - | Plus error | Dark green |
| Esters, Ethers, Alcohols | - | Plus error | Dark green |
| Sulphur dioxide | - | Plus error | Dark green |
| Organic solvents (≥C3) | - | Plus error | Dark green |

Other substance measurable with this detector tube

| Substance | Correction Factor | No. of Pump Strokes | Measuring Range |
|----------------|-------------------|---------------------|-----------------|
| Allyl chloride | 34 | 1/2 | 0.1 to 3.4% |
| Heptane | 1.0 | 1 or 2 | 30 to 2000 ppm |
| Isobutene | 22 | 1 | 0.07 to 2.2% |

Calibration gas generation Static gas dilution method

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