

**Performance**

| | |
|---|--|
| Measuring Range | 25 to 1400 ppm |
| Number of Pump Strokes | 1 |
| Correction Factor | 1 |
| Sampling Time | 4 minutes per pump stroke |
| Detecting Limit | 5 ppm (n=1) |
| Colour Change | Orange → Dark Green |
| Reaction Principle | Butane reduces chromic acid to form chromic sulphate, which is dark green in colour $\text{C}_4\text{H}_{10} + \text{Cr}^{6+} + \text{H}_2\text{SO}_4 \longrightarrow \text{Cr}^{3+}$ |
| Coefficient of Variation | 10% (for 25 to 400 ppm), 5% (for 400 to 1400 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 |
|------------------|---------------|--------------|-------------------------|
| Organic solvents | - | Plus error | Dark green |

Other substance measurable with this detector tube

| Substance | Correction Factor | Pump Strokes | Measuring Range |
|-----------|-------------------|--------------|-----------------|
| Isobutane | Factor : 2.2 | 1 | 55 to 3080 ppm |
| Pentane | Factor : 1.2 | 1 | 30 to 1680 ppm |

Calibration gas generation Static gas dilution method

| TLV-TWA | TLV-STEL | Explosive range |
|---------|----------|-----------------|
| 1000ppm | - | 1.6 to 8.5% |