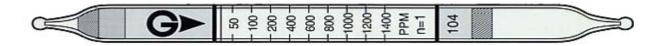
**Butane** C<sub>4</sub>H<sub>10</sub> **No.104** 



## **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 C <sub>4</sub> H <sub>10</sub> + Cr <sup>6+</sup> + H <sub>2</sub> SO <sub>4</sub> → Cr <sup>3+</sup> |  |  |
| 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%     |