

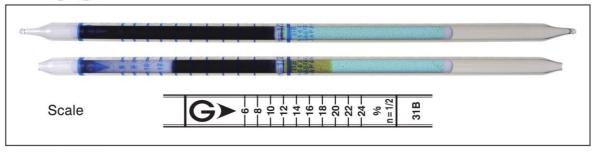


Oxygen O2

Part No.:31B

Oxygen O2

No.31B



Performance

| Measuring range | 3 to 6 % | 6 to 24 % | |
|------------------------|------------|------------|--|
| Number of pump strokes | 1 (100 mL) | 1/2(50 mL) | |
| Correction factor | 1/2 | 1 | |
| Sampling time | 1 min | 30 sec | |

Detecting limit: 2 % (1 pump stroke)

Colour change: Black → White

Operating conditions: Temperature 0 to 40 °C (32 to 104 °F) correction not used

Relative humidity 0 to 90 % correction not used

Relative standard deviation: 5 % (for 6 to 24 %) Tube quantity and number of tests per box: 5 tubes for 5 tests

Shelf life: 36 months

Reaction principle

 $O_2 + 4TiCl_3 + 6H_2O \rightarrow 4TiO_2 + 12HCl$

Possible coexisting substances and their interferences

| Substance | Concentration | Interference | Changes colour by itself to |
|-----------------|---------------|--------------|-----------------------------|
| Carbon dioxide | ≥ 40% | + | } No |
| Carbon monoxide | | No | J 140 |

Hydrogen chloride is trapped in the HCl filter layer.

Calibration gas generation

Dynamic gas dilution method

Special note

If more than 40% carbon dioxide is coexisted, the tube reading will be 1% higher than the true concentration. (At 21% oxygen concentration tube 31B indicates 22%)