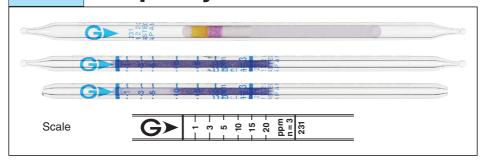
Pyrotube

Sulphuryl Fluoride SO₂F₂ No.231



Performance

| Measuring range | 1 to 20 ppm | | |
|------------------------|-------------|--|--|
| Number of pump strokes | 3(300 mL) | | |
| Correction factor | 1 | | |
| Sampling time | 6 min | | |

0.4 ppm (3 pump strokes) Detecting limit: Colour change: Bluish purple → White

Operating conditions: Temperature 0 to 35 °C (32 to 95 °F) correction used

Relative humidity 0 to 90 % correction not used

Relative standard deviation: 10 % (for 1 to 20 ppm) Tube quantity and number of tests per box : 9 tubes for 4 tests

Shelf life: 24 months

Reaction principle

 $SO_2F_2 \rightarrow SO_2$

 $SO_2 + I_2 + H_2O \rightarrow HI + H_2SO_4$

Possible coexisting substances and their interferences

| Substance | Concentration | Interference | Changes colour by itself to |
|------------------------------|---------------|--------------|-----------------------------|
| Sulphur dioxide | ≥ 0.04 ppm | + | White (≥ 0.05 ppm) |
| Carbon dioxide | ≦ 5% | No | No |
| Chloropicrin (CP) | ≦ 50 ppm | No | No (≦ 50 ppm) |
| Methyl isothiocyanate (MITC) | ≦ 50 ppm | No | No (≦ 50 ppm) |
| Low oxygen environment | | + | No |

Calibration gas generation

High pressure gas cylinder method