

Sulfuryl Fluoride 1/a

Order no. 8103471

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General data

Measuring range:	1 to 5 ppm
Number of strokes n:	6
Measuring time:	approx. 3 min
Standard deviation:	± 30 %
Color change:	light blue → light pink

Permissible ambient conditions

Temperature:	0 to 40 °C
Humidity:	15 to 90 % r. h.

At 0 to 10 °C, sulfuryl fluoride concentrations are indicated with roughly half the sensitivity. At 30 to 40 °C and a humidity < 30 % r. h., readings are only detectable from > 2 ppm. At 30 to 40 °C and a humidity > 75 % r. h., sulfuryl fluoride concentrations are indicated with roughly half the sensitivity.

Reaction principle

- Sulfuryl fluoride (pyrolysis) → HF
- HF + Zr / quinalizarin → pink reaction product

Cross-sensitivity

Fluorinated hydrocarbons are also indicated, but with different sensitivities. Ammonia and other alkaline gases can shorten or prevent the reading depending on the concentration. The following have no effect on the reading of 3 ppm sulfuryl fluoride:

2 ppm formaldehyde, 5 ppm methyl bromide, and 1 ppm phosphine.

The sensitivity decreases as the oxygen concentration decreases.

For example, the 3 ppm reading is very weak at 18 % oxygen.

Additional note

Do not use in explosion-hazard areas, the tube heats up. Do not touch the tubes in the region of the pre-layer during and shortly after measurement.



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