



RAE Systems, Inc.
1339 Moffett Park Dr.
Sunnyvale, CA 94089 USA

Telephone 408-752-0723
Tube Orders 1-888-723-8823
Web www.raesystems.com

Gas Detection Tube Data Sheet

Sulfur Dioxide SO₂ No. 10-107-30

	Extended Range	Extended Range	Standard Range
Range (ppmv)	50 - 1000	100 - 2000	200 - 4000
No. of Pump Strokes	2	1	0.5
Sample Volume (mL)	200	100	50
Sample Time (min)	2 x 1	1	1
Correction Factor	0.25	0.5	1

Precision (Relative Standard Deviation)*: $\leq \pm 10\%$

Linearity with No. of Pump Strokes: $r^2 = 0.999$

Humidity: No effect 5 - 50% RH; 100% RH reduces the response by about 40%

Temperature Range: 0 - 40°C
(32 - 104°F)

Temp (°C/°F)	0/32	10/50	25/77	40/104
Corr. Factor	1.1	1.0	1.0	1.0

Storage Life: 2 years in darkness at 5 - 25°C (40 - 77°F). Refrigeration preferred.

Color Change: Blue → Yellow

Reaction Principle: $\text{SO}_2 + 2\text{NaOH} \rightarrow \text{Na}_2\text{SO}_3 + \text{H}_2\text{O}$ (pH indicator change)

Cross-sensitivity: Substance	Concentration (ppmv)	Apparent Reading*
CO	3000	0
CO ₂	10%	0
NO	100	0
NH ₃	300	0 [#]
CH ₄	25000	0
H ₂ S	100	0
Hexane	1200	0
Isobutylene	100	0
Toluene	100	0

*Data based on RAE pumps and tubes used in standard range.

[#]Reduces reading in mixture.

Other Possible Interferences: Acid gases

Caution: Dispose of spent or expired tubes according to local regulations.
Possibly hazardous materials are given under the section Reaction Principle.