



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. 10-107-15

	Extended Range	Standard Range	Extended Range
Range (ppmv)	1 - 15	2 - 30	4 - 60
No. of Pump Strokes	4	2	1
Sample Volume (mL)	400	200	100
Sample Time (min)	4 x 2	2 x 2	2
Correction Factor	0.5	1	2

Precision (Relative Standard Deviation)*: $\leq \pm 12\%$

Linearity with No. of Pump Strokes: $r^2 = 0.991$

Humidity: No effect 5 - 90% RH.

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

Temp (°C/°F)	0/32	10/50	24/75	40/104
Corr. Factor	1.1	1.1	1.0	1.1

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

Color Change: Blue-green → Yellow

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

<u>Cross-sensitivity:</u> Substance	Concentration (ppmv)	Apparent Reading*
CO	15000	0
CO ₂	50000	0
NO	100	0
NH ₃	100	2 (blue) [#]
H ₂ S	2000	3 (blue)
PH ₃	30	0
HF	50	0.5
CH ₄	25000	0
Hexane	1500	0
Toluene	400	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.