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Gas Detection Tube Data Sheet

Sulfur Dioxide SO₂ No. 10-107-20

	Extended Range	Standard Range	Extended Range
Range (ppmv)	2.5 - 50	5 - 100	10 - 200
No. of Pump Strokes	2	1	0.5
Sample Volume (mL)	200	100	50
Sample Time (min)	2 x 2	2	1.5
Correction Factor	0.5	1	2

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

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

Humidity: No effect 5 - 50% RH; 100% RH reduces the response by about 25%

<u>Temperature Range:</u> 0 - 40°C (32 - 104°F)	Temp (°C/°F)	0/32	10/50	25/77	40/104
	Corr. Factor	1.2	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)

<u>Cross-sensitivity:</u> 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
Isobutylene	100	0
Hexane	1200	0
Toluene	100	0
Acetone	10000	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.