

Hydrogen Sulfide H₂S

No. N-10-103-03



Range (ppmv)	Extended Range	Standard Range	Extended Range
No. of Pump Strokes	Do not extend	0.5 – 10	Do not extend
Sample Volume (mL)		5	
Sample Time (min)		500	
Correction Factor		1.5	
		1	

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

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

Humidity: Tubes must be used @ <5% RH. Reading drops sharply above 5% RH.

Temperature Range: No effect between 0 - 40°C (32 - 104°F).

Storage Life: 2 year in darkness at Below 10°C(50°F). Refrigeration preferred.

Color Change: Pale White → Brown

Reaction Principle: $\text{H}_2\text{S} + \text{Pb}(\text{CH}_3\text{COO})_2 \rightarrow \text{PbS} + 2\text{CH}_3\text{COOH}$

<u>Cross-sensitivity:</u> Substance	Concentration (ppmv)	Apparent Reading*
H ₂	100%	0^
CO	250	0
CH ₄	25000	0
NH ₃	300	0
NO ₂	200	0‡
SO ₂	20	0
SO ₂	1800	0†
CS ₂	100	0
Methyl mercaptan	100	0
Diethyl sulfide	100	0
Hexane	100	0
Isobutylene	100	0^
Toluene	100	0

Data based on NAGCO pumps and tubes used in standard range.

^ No effect in mixtures.

‡ Interferes in mixtures; May result in transient light brown H₂S response.

† Interferes in mixtures; High SO₂ concentrations suppress H₂S response.

Concentrations in the high % range leave a yellow color over the entire tube