

Hydrogen Sulfide H₂S

No. N-10-103-13



	Extended Range	Standard Range	Extended Range
Range (ppmv)	0.5 - 1 ppm	1 - 30 ppm	2 - 60ppm
No. of Pump Strokes	4	2	1
Sample Volume (mL)	400	200	100
Sample Time (min)	6	3	2
Correction Factor	0.5	1	2

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

Linearity with No. of Pump Strokes: $r^2 = 0.998$

Humidity: No effect 5 - 85% RH

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

Temp (°C/°F) 0/32 10/50 25/77 40/104

Corr. Factor 0.95 0.95 1.0 1.2

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

Color Change: White → Light Brown

Reaction Principle: $H_2S + Pb(CH_3COO)_2 \rightarrow PbS + 2CH_3COOH$

Cross-sensitivity: 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.