

Mercaptans RSH

No. N10-129-20



	Extended Range	Standard Range	Extended Range
Range (ppmv)	2.5 - 60	5 - 120	10 - 240
No. of Pump Strokes	2	1	0.5
Sample Volume (mL)	200	100	50
Sample Time (min)	2 x 2.0	2.0	1.0
Correction Factor	0.5	1	2.1

Precision (Relative Standard Deviation)*: $\leq \pm 20\%$

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

Humidity: No effect between 5 - 90% RH.

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

Storage Life: 1 year in darkness at 5 - 25° C (40 - 77° F). Refrigeration preferred.

Color Change: White → Yellow

Reaction Principle: $2\text{RSH} + \text{PdSO}_4 \rightarrow (\text{RS})_2\text{Pd} + \text{H}_2\text{SO}_4$

<u>Cross-sensitivity:</u> Substance	Concentration (ppmv)	Apparent Reading*	Corr. Factor
H ₂ S	500	01	-
CO	500	02	-
Diethyl sulfide	5000	303	-
Ethyl mercaptan	60	60	1.0
Propyl mercaptan	60	60	1.0
Butyl mercaptan	60	29	2.0
Acetylene	2000	04	-
Ethylene	2000	05	-

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

1 Up to 500 ppm H₂S is trapped in the pretreatment layer.

2 Gray through the entire tube, will not affect RSH reading in mixtures.

3 Interferes in mixtures; may result in high response.

4 Pale brown through the entire tube, will not affect RSH reading in mixtures.

5 Light peach through the entire tube, will not affect RSH reading in mixtures.