

Mercaptan 0.1/a

Order No. 81 03 281

H

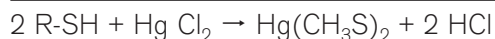
Application Range

Standard Measuring Range:	0.1 to 2.5 ppm	/ 3 to 15 ppm
Number of Strokes n:	10	/ 2
Time for Measurement:	approx. 3 min	/ approx. 40 s
Standard Deviation:	± 10 to 15 %	
Color Change:	yellow → red	

Ambient Operating Conditions

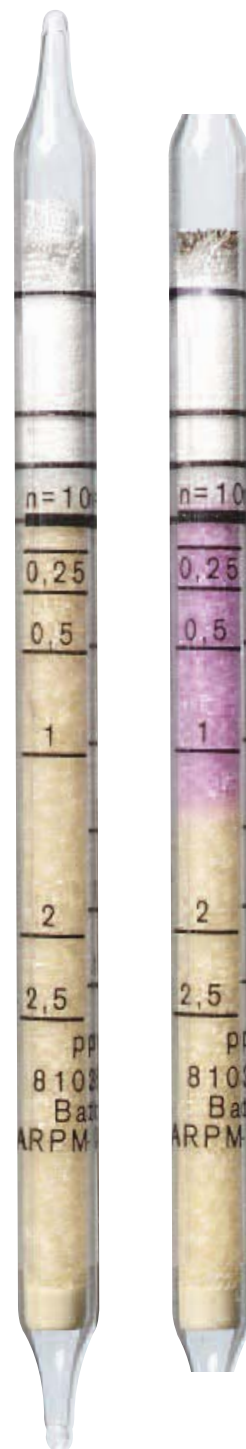
Temperature:	5 to 40 °C
Absolute Humidity:	2 to 40 mg H ₂ O / L

Reaction Principle



Cross Sensitivity

Propyl mercaptan and n-butyl-mercaptan are indicated, but with different sensitivities. 4 ppm ethylene, 30 ppm CO, 10 ppm tetrahydrothiophene and 100 ppm hydrogen sulfide do not affect the indication. Hydrogen sulfide changes the pre-layer to black.



ST-180-2001

Mercaptan 0.5/a

Order No. 67 28 981

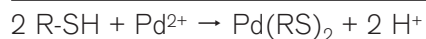
Application Range

Standard Measuring Range:	0.5 to 5 ppm
Number of Strokes n:	20
Time for Measurement:	approx. 5 min.
Standard Deviation:	± 10 to 15 %
Color Change:	white → yellow

Ambient Operating Conditions

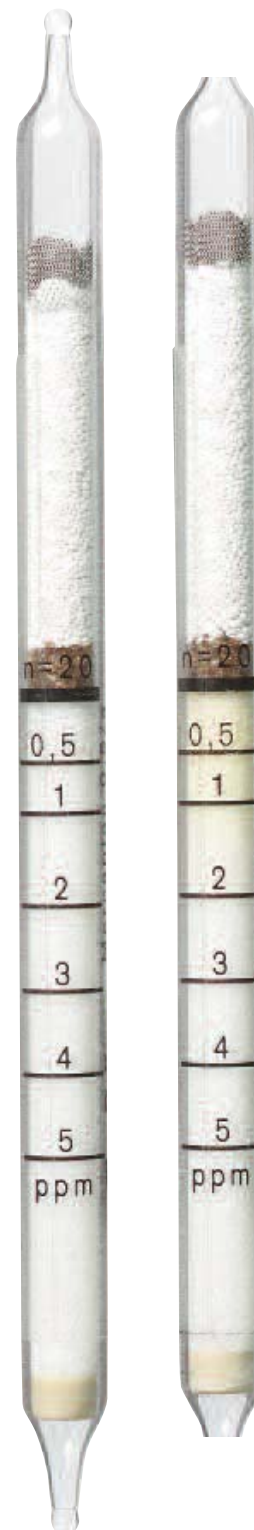
Temperature:	10 to 40 °C
Absolute Humidity:	3 to 15 mg H ₂ O / L

Reaction Principle



Cross Sensitivity

Higher molecular weight alkyl mercaptans (e.g. propyl- and butylmercaptans) are indicated with approximately the same sensitivity. 1,000 ppm ethylene, 2,000 ppm carbon monoxide and 200 ppm hydrogen sulfide do not affect the indication. Hydrogen sulfide discolors the pre-layer black.



ST-58-2001

Mercaptan 20/a

Order No. 81 01 871



Application Range

Standard Measuring Range:	20 to 100 ppm
Number of Strokes n:	10
Time for Measurement:	approx. 2.5 min
Standard Deviation:	± 10 to 15 %
Color Change:	white → yellow brown

Ambient Operating Conditions

Temperature:	0 to 50 °C
Absolute Humidity:	3 to 30 mg H ₂ O / L

Reaction Principle

- $2 \text{R-SH} + \text{Cu}^{2+} \rightarrow \text{Cu}(\text{RS})_2 + 2 \text{H}^+$
- $\text{Cu}(\text{RS})_2 + \text{S} \rightarrow \text{yellow brown copper compound}$

Cross Sensitivity

Higher molecular weight alkyl mercaptans (e.g. propyl- and butylmercaptans) are indicated with approximately the same sensitivity.

Hydrogen sulfide is indicated with approximately twice the sensitivity of the mercaptans (e.g. 10 ppm hydrogen sulfide gives an indication of 20 ppm). In presence of Hydrogen Sulfide a measurement of mercaptans is impossible.

Additional Information

After performing the required ten pump strokes the reagent ampoule must be broken. The liquid of the ampoule must be transferred to the indicating layer and carefully drawn through it using the pump. After completing the measurement wait for 3 min prior to evaluation.



ST-57-2001