203

# Mercaptan 20/a Order No. 81 01 871

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## 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 $\rightarrow$ yellow brown |

# Ambient Operating Conditions

| Temperature:       | 0 to 50 °C                      |
|--------------------|---------------------------------|
| Absolute Humidity: | 3 to 30 mg H <sub>2</sub> O / L |

### **Reaction Principle**

a) 2 R-SH + Cu<sup>2+</sup> → Cu(RS)<sub>2</sub> + 2 H<sup>+</sup>
b) Cu(RS)<sub>2</sub> + S → 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.

