

Ethylene Glycol 10

Order No. 81 01 351

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Application Range

Standard Measuring Range:	10 to 180 mg/m ³ Corresponds to 4 to 70 ppm.
Number of Strokes n:	10
Time for Measurement:	approx. 7 min
Standard Deviation:	± 20 to 30 %
Color Change:	white → pink

Ambient Operating Conditions

Temperature:	10 to 35 °C
Absolute Humidity:	5 to 15 mg H ₂ O / L

Reaction Principle

- $\text{OH-C}_2\text{H}_4\text{-OH} \rightarrow \text{HCHO}$
- $\text{HCHO} + \text{C}_6\text{H}_4(\text{CH}_3)_2 + \text{H}_2\text{SO}_4 \rightarrow \text{quinoid reaction products}$

Cross Sensitivity

Styrene, vinyl acetate and acetaldehyde are indicated with a yellowish brown discoloration.

It is impossible to measure ethylene glycol in the presence of formaldehyde and ethylene oxide because they produce the same discoloration.

Additional Information

The reagent ampoule must be broken before carrying out the measurement.

