# Carbon Monoxide 0.3%/b

Order No. CH 29 901

#### **Application Range**

Standard Measuring Range:	0.3 to 7 Vol% CO
Number of Strokes n:	1
Time for Measurement:	approx. 30 s
Standard Deviation:	± 10 to 15 %
Color Change:	white → brown green

### **Ambient Operating Conditions**

Temperature:	0 to 50 °C
Absolute Humidity:	max. 50 mg $\rm H_2O$ / $\rm L$

# Reaction Principle

$$5 \text{ CO} + \text{I}_2\text{O}_5 \xrightarrow{\text{H}_2\text{S}_2\text{O}_7} \text{I}_2 + 5 \text{ CO}_2$$

# Cross Sensitivity

Acetylene is also indicated, however, with less sensitivity. Petroleum hydrocarbons, benzene, halogenated hydrocarbons and hydrogen sulfide are retained in the pre-layer. In the case of higher concentrations of interfering hydrocarbons, use should be made of a carbon pre-tube (CH 24 101). Higher concentrations of easily cleavable halogenated hydrocarbons (e.g. trichloroethylene), are liable to form chromyl chloride in the pre-layer which changes the indicating layer to a yellowish-brown. CO determination is impossible in the case of high olefin concentrations.



