# Benzene 15/a

Order No. 81 01 741

#### Application Range

1-1 3-	
Standard Measuring Range:	15 to 420 ppm
Number of Strokes n:	20 to 2
Time for Measurement:	max. 4 min
Standard Deviation:	± 30 %
Color Change:	white → red brown

#### **Ambient Operating Conditions**

Temperature:	0 to 30 °C
Absolute Humidity:	max. 30 mg $H_2O$ / L

### Reaction Principle

- a)  $2 C_6 H_6 + HCHO \rightarrow C_6 H_5 CH_2 C_6 H_5 + H_2O$
- b)  $C_6H_5$ - $CH_2$ - $C_6H_5$  +  $H_2SO_4$   $\rightarrow$  p-quinoid compound

## Cross Sensitivity

Other aromatics (toluene, xylene) are retained in the pre-layer causing a reddish brown discoloration. If the toluene or xylene concentrations are too high the entire pre-layer up to the indicating layer is discolored making a benzene measurement impossible. Petroleum hydrocarbons, alcohols and esters do not affect the indication.





