

Application Data

Application Range	Determination of benzene in air	
Measuring Range	2 to 10 ppm	0.25 to 2 ppm
Number of Strokes	1	5
Measuring Time	approx. 1 min	approx. 5 min
Standard Deviation	± 15 %	
Color Change	light grey -----> dark grey to black	
Notice	The first scale mark on the tube's scale n = 1 equals 2 ppm. The first scale mark on the tube's scale n = 5 equals 0.25 ppm.	

Ambient Conditions

Temperature	Humidity	Air Pressure
0 to 40 °C (32 to 104 °F) 31 to 40 °C (88 to 104 °F): Standard deviation: ± 25 %	< 40 mg/L	$F = \frac{1013 \text{ hPa}}{\text{Actual atmospheric Pressure hPa}}$

Principle of Reaction

Benzene + Au³⁺ -----> dark grey to black reaction product

Cross Sensitivity

Up to a concentration of approx. 40 ppm (n = 5 scale) and 200 ppm (n = 1 scale), toluene, xylene and ethyl benzene are kept in the pre-layer where they cause a brown discoloration.
800 ppm n-Octane (n = 5 scale) / 4000 ppm n-Octane (n = 1 scale) do not cause any discoloration in the indicating layer.