

Vinyl Chloride 0.5/b

Order No. 81 01 721

Application Range

Standard Measuring Range:	5 to 30 ppm	/ 0.5 to 5 ppm
Number of Strokes n:	1	/ 5
Time for Measurement:	approx. 30 s	/ approx. 2.5 min
Standard Deviation:	± 15 to 20 %	
Color Change:	white → violet	

Ambient Operating Conditions

Temperature:	10 to 30 °C
Absolute Humidity:	max. 20 mg H ₂ O / L

Reaction Principle

- a) $\text{CH}_2=\text{CHCl} + \text{Cr}^{\text{VI}} \rightarrow \text{Cl}_2$
 b) $\text{Cl}_2 + \text{dimethyl naphtidine} \rightarrow \text{violet reaction product}$

Cross Sensitivity

100 ppm hydrogen chloride, 20 ppm chlorine, 10 ppm carbon tetrachloride, 10 ppm chloroform or 5 ppm perchloroethylene are not indicated.

Trichloroethylene and chlorobenzene are indicated with less sensitivity.

1,1-dichloroethylene is indicated with almost identical sensitivity.

Vapors of organic solvents consume part of the oxidation layer so that the resultant reading is somewhat lower.

Examples: a reading of 0.5 ppm vinyl chloride will occur by

5 ppm vinyl chloride + 100 ppm butadiene or

5 ppm vinyl chloride + 10 ppm ethylene

