Tetrahydrothiophene 1/b

Order No. 81 01 341

Application Range

Standard Measuring Range:	1 to 10 ppm	/ 4 to 40 mg/m³
Number of Strokes n:	30	
Time for Measurement:	in air:	approx. 15 min
	in natural gas:	approx. 10 min
Standard Deviation:	± 15 to 20 %	
Color Change:	violet → yellow brown	

Ambient Operating Conditions

Temperature:	0 to 35 °C
Absolute Humidity:	< 30 mg H_2O / L

Reaction Principle

THT + $KMnO_4$ → yellow brown reaction product

Cross Sensitivity

Up to 10 ppm hydrogen sulfide is adsorbed in the pretube, causing a brown discoloration. It is impossible to measure tetrahydrothiophene in the presence of mercaptans. Up to 100 ppm of olefines (e. g. ethene, propene) will cause the color of the indicating layer to become lighter, at higher concentrations the olefins are also indicated. Up to 200 ppm methanol does not interfere.

Extension of Measuring Range

1.6 to 16 ppm / 6.4 to 64 mg/m³

n = 20 multiply the reading by 1.6

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