Nickel Tetracarbonyl 0.1/a

Order No. CH 19 501

Application Range

Standard Measuring Range:	0.1 to 1 ppm Discoloration compared to color standard.
Number of Strokes n:	20
Time for Measurement:	approx. 5 min
Standard Deviation:	± 50 %
Color Change:	yellow → pink

Ambient Operating Conditions

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

Reaction Principle

a) $Ni(CO)_4 + I_2 \rightarrow NiI_2 + 4\ CO$

b) NiI_2 + Dimethylglyoxime → pink colored complex

Cross Sensitivity

Iron pentacarbonyl is also indicated by a brownish discoloration, however, with less sensitivity. Measurement of nickel tetra carbonyl is not possible in the presence of hydrogen sulfide of sulfur dioxide, since the reading is suppressed. Such a disturbance can be recognised by decoloration of the indicating layer even before the reagent ampoule is opened.

Additional Information

After performing the required 20 pump strokes the reagent ampoule must be broken and the liquid carefully drawn onto the indicating layer using the pump.

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