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Oxidation of hydroxylamine as an indicator reaction for the kinetic determination of copper and iron

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Abstract

The oxidation of hydroxylamine by hexacyanoferrate(III) is proposed as an indicator reaction for kinetic determining copper(II) traces (detection limit of 2 × 10-8 M). It is shown that iron(II) and total iron can be determined with a detection limit of 2 × 10-6 M using the oxidation of hydroxylamine by potassium bromate, catalyzed by Fe(II). The bromination of Methyl Orange catalyzed by bromide formed in the reduction of the bromate ion is proposed as an indicator reaction. © 1999 MAEe Cyrillic signK "Hayka/Interperiodica".