

Test method for the determination of Fe(III) ions and their metrological characteristics

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Abstract

The test-method for determination of Fe(III), based on the use of immobilized indicator paper potassium thiocyanate and cetylpyridinium chloride, has been proposed. The metrological characteristics of the test-method using detection techniques with a binary respond: lower determined limit of Fe(III)content – $1 \cdot 10^{-4}$ mol/l, interval unreliability reaction $1 \cdot 10^{-4} - 1 \cdot 10^{-5}$ mol/l and $c_{\min}(\text{Fe}^{3+}) = (3.5 \pm 0.2) \cdot 10^{-5}$ mol/l were determined.