



## 946 Portable VA Analyzer

### General information

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Software version: 1.0

Instrument:

Sensor: scTRACE Gold

User name:

Report: No

Report elements: -

## Method

### General

Method name: AB416 Determination As(total).detp

Remarks: 15 mL sample + 3 mL electrolyte + 0.1 mL KMnO<sub>4</sub> solution

Electrolyte: c(sulfamic acid) = 1 mol/L, c(citric acid) = 0.5 mol/L, c(KCl) = 0.45 mol/L

KMnO<sub>4</sub> solution: c(KMnO<sub>4</sub>) = 0.2 mmol/L

### Determination

Sample volume (mL): 15.0

Total cell volume (mL): 18.1

Stirring time (s): 10.0

Stirring rate (1/min): 3000

Measure blank: No

No. of blanks: 0

Blank value correction: No

No. of replications: 2

No. of additions: 2

### Voltammetric

Measuring mode: Square wave

Current measuring range: +/- 10 uA

#### Cyclovoltammetric pretreatment

Start potential (V): -0.2

Vertex potential (V): 1.0

Potential step (V): 0.01

Sweep rate (V/s): 1.0

No. of cycles: 5

#### Potentiostatic pretreatment

Potential 1 (V): -1.0

Waiting time 1 (s): 60.0

Potential 2 (V): -0.25

Waiting time 2 (s): 5.0

Equilibration time (s): 5.0

#### Sweep

Start potential (V): -0.3



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End potential (V): 0.4

Potential step (V): 0.01

Pulse amplitude (V): 0.02

Frequency (Hz): 80.0



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## Evaluation

### Data processing

Smoothing: 5

Calibration method: Standard addition

### Peak evaluation

	As(total)
Characteristic potential (V)	0.0
Tolerance (V)	0.1
Min. width (V)	0.05
Max. width (V)	0.5
Min. measured quantity (µA)	0.02
Baseline type	Linear
Base point automatic	Yes
Start base point (V)	0.0
End base point (V)	0.0

### Standard solutions

	As(total)	Volume (mL)
Standard 1	0.5 mg/L	0.1
Standard 2	-	-
Standard 3	-	-
Standard 4	-	-