946 Portable VA Analyzer

General information

Software version: 1.0

Instrument:

Sensor: scTRACE Gold

User name:

Report: No

Report elements: -

Metrohm

946 Portable VA Analyzer

Method

General

Method name: AB429 Determination Cu.detp
Remarks: 15 mL sample + 3 mL Electrolyte (c(KCl) = 0.3 mol/L, c(HCl) = 0.1)

Determination

Sample volume (mL): 15.0
Total cell volume (mL): 18.0
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: Differential pulse
Current measuring range: +/- 1 uA

Cyclovoltammetric pretreatment
Start potential (V): 0.0
Vertex potential (V): 0.75
Potential step (V): 0.01
Sweep rate (V/s): 1.0
No. of cycles: 5

Potentiostatic pretreatment
Potential 1 (V): 0.75
Waiting time 1 (s): 10.0
Potential 2 (V): -0.3
Waiting time 2 (s): 30.0
Equilibration time (s): 10.0

Sweep
Start potential (V): -0.1
End potential (V): 0.6
Potential step (V): 0.006

Metrohm

946 Portable VA Analyzer

Pulse amplitude (V): 0.05

Pulse time (s): 0.02

Sweep rate (V/s): 0.1

Metrohm

946 Portable VA Analyzer

Evaluation

Data processing

Smoothing: 1

Calibration method: Standard addition

Peak evaluation

	Cu
Characteristic potential (V)	0.25
Tolerance (V)	0.05
Min. width (V)	0.05
Max. width (V)	0.4
Min. measured quantity (µA)	0.001
Baseline type	Linear
Base point automatic	Yes
Start base point (V)	0.0
End base point (V)	0.0

Standard solutions

	Cu	Volume (mL)
Standard 1	1.0 mg/L	0.1
Standard 2	-	-
Standard 3	-	-
Standard 4	-	-