



License ID 459712  
Client ID 001-NBK-00558  
User Metrohm

Program version viva 2.0 - 54  
2017-05-23 16:37:11 UTC+2

## Method parameters

Method . . . . . AB 429 Cleaning scTRACE Gold  
Method saving date . . . . . 2017-05-23 16:36:33 UTC+2  
Method version . . . . . 1  
Method group . . . . . viva example methods  
Method status . . . . . original  
Method saved by (full name) . . . . . Metrohm International Headquarters  
Method saved by (short name) . . . . . Metrohm

## START

### Main track

#### General

Workplace view

Current view . . . . . on

Track view for live window

Live display 1 . . . . . Main track

Live display 2 . . . . . Main track

Electrode test . . . . . off

#### Application note

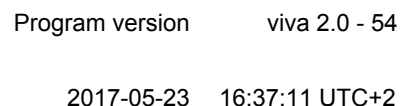
Measuring solution: 10 mL H<sub>2</sub>O + 2 mL Electrolyte (c(KCl) = 0.3 mol/L, c(HCl) = 0.1)

#### Sample data variables

Name	Type	Assignment	Fixed value	Comment	Monitoring
ID1	Text	ID1		Sample identification 1	off
ID2	Text	ID2		Sample identification 2	off
ID3	Text	ID3		Sample identification 3	off
Sample type	Text	Sample type			off
Sample amount	Number	Sample amount			off
Sample amount unit	Text	Sample amount unit			off

Name . . . . . ID1  
Type . . . . . Text  
Assignment . . . . . on. . . . . ID1  
Fixed value . . . . . off.  
Check at start . . . . . on  
Comment . . . . . Sample identification 1

Name . . . . . ID2  
Type . . . . . Text  
Assignment . . . . . on. . . . . ID2  
Fixed value . . . . . off.  
Check at start . . . . . on  
Comment . . . . . Sample identification 2



Add manually . . . . . on



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Display standard message . . . . . on  
Display message defined by the user . . . . . off  
Already added . . . . . off  
Add with dosing device . . . . . off

**ADD AUX Add electrolyte**

Auxiliary solution

Solution . . . . . Electrolyte  
Volume . . . . . 2 mL  
Include volume in calculation . . . . . on

Addition

Add manually . . . . . on  
Display standard message . . . . . on  
Display message defined by the user . . . . . off  
Already added . . . . . off  
Add with dosing device . . . . . off

**CALL VA Call cleaning**

Call text . . . . . Call cleaning  
Track name . . . . . VA track  
Condition . . . . . off

**VA TRACK VA track**

Return immediately . . . . . off

**LOOP Replications**

Stop criteria

Max. run number . . . . . on  
Max. run number . . . . . 4  
Maximum run time . . . . . off  
Signal assessment for DT . . . . . off  
Condition . . . . . off

**CVS Cleaning**

**General/Hardware**

Device

Device name . . . . . 884\_1  
Device type . . . . . 884 Professional VA

Sensors/Electrodes

Working electrode . . . . . RDE  
Sensor type . . . . . RDE/SSE  
Reference electrode . . . . . Reference electrode  
Auxiliary electrode . . . . . Auxiliary electrode  
Electrode test . . . . . off

Stirrer

Stirring rate . . . . . 2000 min<sup>-1</sup>  
Hydrodynamic measurement . . . . . off

**Pretreatment**



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Stirring time . . . . . 10 s  
Cyclovoltammetric pretreatment  
Start potential . . . . . -1.0 V  
Vertex potential . . . . . 0.8 V  
Sweep rate . . . . . 1 V/s  
Cycles . . . . . 5  
Duration . . . . . 18.00 s

Potentiostatic pretreatment  
Potential 1 . . . . . 0.8 V  
Waiting time 1 . . . . . 10 s  
Potential 2 . . . . . -0.3 V  
Waiting time 2 . . . . . 5 s  
Potential 3 . . . . . off V  
Waiting time 3 . . . . . 0.0 s  
Potential 4 . . . . . off V  
Waiting time 4 . . . . . 0.0 s  
Potential 5 . . . . . off V  
Waiting time 5 . . . . . 0.0 s  
Equilibration time . . . . . 5.0 s

**Sweep**  
Start potential . . . . . -0.2 V  
1st vertex potential . . . . . 0.6 V  
2nd vertex potential . . . . . -0.2 V  
Potential step . . . . . 0.01 V  
Potential step time . . . . . 0.100 s  
Sweep rate . . . . . 0.1 V/s  
Preparation cycles . . . . . 0  
Measuring cycles . . . . . 1  
Sweep duration . . . . . 16.20 s

**Post-treatment**  
Cleaning  
Cleaning potential . . . . . off V  
Cleaning time . . . . . 0.0 s  
Standby potential  
Standby potential . . . . . off V

**Potentiostat**  
Current measuring range  
Highest range . . . . . 224 mA  
Lowest range . . . . . 200 nA

**TRACK Shut off**  
Return immediately . . . . . off  
Delete old data . . . . . off

**STIR & PURGE STIR & PURGE OFF**  
Device



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Device name . . . . . 884\_1  
Device type . . . . . 884 Professional VA  
Stir  
Stirring rate . . . . . 2000 min<sup>-1</sup>  
Switch on . . . . . off  
Switch off . . . . . on  
Duration . . . . . off  
Purge  
Switch on . . . . . off  
Switch off . . . . . on  
Duration . . . . . off

**MAIN  
VALVE**

**N2 OFF**

Device  
Device name . . . . . 884\_1  
Device type . . . . . 884 Professional VA  
Action  
Open . . . . . off  
Close . . . . . on

**EXIT**

**Exit track**

**CALL**

**Exit shut off**

Call text	Track name	Sample type		Condition
Exit shut off	Shut off	off	Sample	off

**ERROR**

**Error track**

**CALL**

**Error shut off**

Call text	Track name	Sample type		Condition
Error shut off	Shut off	off	Sample	off

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**Evaluation parameters**

**General**

**Cleaning**

**Data processing**

Smoothing . . . . . 1  
Reversed peaks . . . . . off

**Curve evaluation**

Fixed point evaluation . . . . . on

**Fixed points**



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Fixed point	Measured quantity	Fixed value	Sweep direction
1	Potential	0.075 V	anodic
2	Potential	0.075 V	cathodic

## Substances

### Cleaning

### Substances - Recognition

### Cleaning

### Substances - Baseline

### Cleaning

### Calibration curves

## Results

### Substance concentration in the sample

### Cleaning

## Results

### Additional results

Result	Places	Prefix	Unit
Peak potential	3		V
Height	2	#	A
RSD of the heights of all replications	1		%
Area	2	#	C
RSD of the areas of all replications	1		%
Start base point	3		
End base point	3		
Standardized area	3		
Standardized height	3		
Total volume	3	#	L
Zero-order coefficient	3		
First-order coefficient	3		
Second-order coefficient	3		
Fourth-order coefficient	3		
Coefficient of determination	5		
Substance concentration in measuring vessel	2	#	
RSD of the substance concentration in measuring vessel	1		%
Amount of substance	2	#	



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Result	Places	Prefix	Unit
RSD of the substance concentration in the sample	1		%
Effective addition volume of the standard solution for the evaluation ratio	2	#	L
RSD of the effective addition volume of the standard solution for the evaluation ratio	1		%
Calibration factor DT	2	#	
RSD of the calibration factor DT	1		%
Effective addition volume of the sample solution for the evaluation ratio	2	#	L
RSD of the effective addition volume of the sample solution for the evaluation ratio	1		%

#### Database

Name database . . . . . viva