

Second order conductors. Electrolysis with FG-Module 4.1.13-15



What you can learn about ...

- Electrolysis
- Electrode polarisation
- Conductivity
- Ohm's law

Principle:

In this experiment a copper(II) sulphate solution is to be electrolysed using two different materials - graphite electrodes and copper wires. During the electrolyses the current/voltage curves are recorded.

What you need:

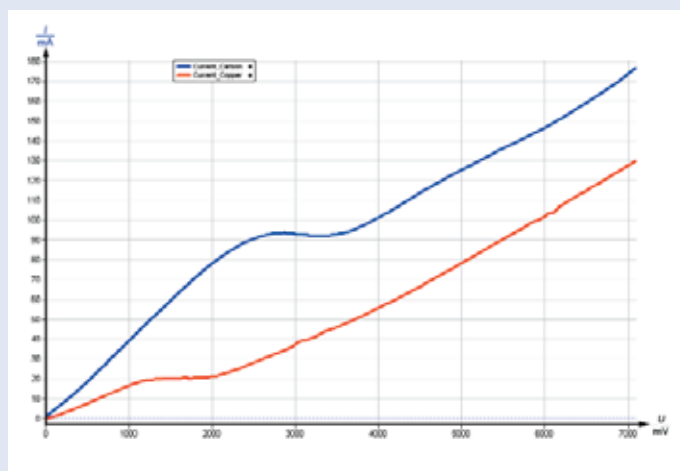
Cobra3 BASIC-UNIT	12150.00	1
Power supply 12V/2A	12151.99	2
Data cable 2 x SUB-D, plug/socket, 9 pole	14602.00	1
Software Cobra3 PowerGraph	14525.61	1
Measuring module Function Generator	12111.00	1
Retort stand, 210 mm x 130 mm, $h = 500$ mm	37692.00	1
Right angle clamp	37697.00	1
Support for two electrodes	45284.01	1
Graphite electrodes, $d = 5$ mm, $l = 150$ mm, 6 pcs.	44510.00	1
Copper wire, $d = 0.5$ mm	06106.03	1
Beaker, DURAN®, tall form, 150 ml	36003.00	1
Graduated cylinder, BORO 3.3, 100 ml	36629.00	1
Precision Balance, Sartorius TE 412	48835.93	1
Spoon with spatula end, $l = 150$ mm, steel, wide	33398.00	1
Stirring rods, BORO 3.3, $l = 300$ mm, $d = 7$ mm	40485.05	1
Wash bottle, plastic, 500 ml	33931.00	1
Copper-II sulphate, cryst., 250 g	30126.25	1
Water, distilled 5 l	31246.81	1
Connecting cable, 4 mm plug, 32 A, red, $l = 50$ cm	07361.01	2
Connecting cable, 4 mm plug, 32 A, blue, $l = 50$ cm	07361.04	2
PC, Windows® 95 or higher		

Complete Equipment Set, Manual on CD-ROM included

Second order conductors.

Electrolysis with FG-Module

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Current/voltage characteristics of an aqueous copper sulphate solution conducted with graphite electrodes and copper wires.

Tasks:

Measure the correlation between voltage and current on second order conductors (copper (II) sulphate solution using two different materials - graphite electrodes and copper wires.