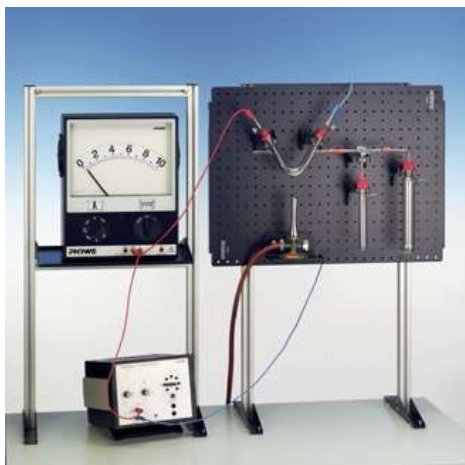


Molten-salt electrolysis

Article no: P1310500



Principle

The electrolysis of molten sodium chloride to obtain chlorine and sodium, which can be used to produce sodium hydroxide, is an important industrial-scale process. The experiment is a simple demonstration of the important steps in this process. Due to the high melting point of sodium chloride, lead chloride (with a lower melting point) is used as starting material in the model experiment (instead of sodium chloride)

Benefits

- Easy and fast experiment set-up
- Impressive demonstration how to produce alkali metals like sodium

Tasks

Demonstration the electrolysis of molten sodium chloride to obtain chlorine and sodium.

Learning objectives

- Electrolysis
- Fused-salt electrolysis
- Preparation of Chlorine and sodium

Scope of delivery

Frame for complete experiments	45500-00	2
Rear-cover for compl.-exp. panel	45501-00	1
Panel for complete experimental setups	45510-00	1
Shelf with hanging device	45505-00	1
Clamping holder,18-25mm	45520-00	2
Clamping holder, turnable, 18-25 mm	45521-00	2

Clamping holder,turnable,8-10mm	45522-00	1
Apparatus carrier w. fix. magnet	45525-00	1
Spring plugs, 50 off	45530-00	1
PHYWE Power supply, universal, analog display DC: 18 V, 5 A / AC: 15 V, 5 A	13503-93	1
PHYWE Demo Multimeter ADM 3: current, voltage, resistance, temperature	13840-00	1
Connecting cord, 32 A, 500 mm, red	07362-01	1
Connecting cord, 32 A, 500 mm, red	07363-01	1
Connecting cord, 32 A, 500 mm, blue	07362-04	1
V-tube for electrolysis, PN19	37027-00	1
Rubber stopper, d = 22/17 mm, 1 hole	39255-01	2
Nozzle for glass screwthread	43903-01	1
Graphite electrode,d=7,l=150,6pc	44512-00	1
Contact socket f.bar electrodes	45283-00	2
Stopcock,3-way,t-shaped, glass	36731-00	1
Test tube GL25/8, w.hose connec.	MAU-27221000	1
Glass tubes,straight, 150 mm, 10	MAU-16074542	1
Wash pipe with frit, GL 25/8	MAU-27229000	1
Glass tube,right-angled,.	MAU-10030703	1
Teclu burner, DIN, natural gas	32171-05	1
Safety gas tubing, DVGW, sold by metre	39281-10	2
Hose clip f.12-20 diameter tube	40995-00	2
Lighter f.natural/liquified gases	38874-00	1
Rubber hose	39282-00	1
Spoon + spatula, steel, l=200mm	46948-00	1
Porcelain dish 25ml, d 50mm	32518-00	1
Beaker, Boro, high-form	46027-00	3
Wash bottle, plastic, 500 ml	33931-00	1
Funnel, glass, top dia. 50 mm	34459-00	1
Round filter, different sizes	32977-04	1

Glass rod, boro 3.3, l=200mm, d=5mm	40485-03	1
Sodium hydroxide, pellets, 500 g	30157-50	1
Lead-II chloride, 500 g	31117-50	1
Starch, soluble 100 g	30227-10	1
Potassium iodide 50 g	30104-05	1
Sodium thiosulphate 5-hydr.250 g	30169-25	1
Water, distilled 5 l	31246-81	1