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GCSE Chemistry SC 9 Edexcel

Electrolysis

Assignment Questions

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SC 9 : Electrolysis

Q1 : What is electrolysis ?

Q2 : Molten Zinc Bromide is decomposed in electrolysis experiment. Write down the half equations for the reactions at the electrodes. Classify them as reduction or oxidation at each electrode.

Q3: Describe electrolysis of copper sulphate solution to obtain pure copper from impure copper.

Q4: Electrolysis of sodium chloride solution NaCl (aq) , produces two useful gases.

- i) Predict the gas that forms at a) anode b) cathode
- ii) Explain why solution remains after electrolysis is alkaline

Q5: A student carries two experiments using copper chloride , CuCl_2 .

- ❖ In experiment one student placed two graphite electrodes into copper chloride powder in a beaker, she then connects the electrodes to a d.c electricity supply and observe no visible changes at either of electrodes.
- ❖ In experiment two student she adds water to dissolve copper chloride. She reconnects the electrodes to d.c. supply and observe brown solid formed on cathode and bubbles of a yellow-green gas released on anode.

Explain differences between the results in above two experiments.

With detailed half equations explain the formation of products of copper chloride solution.