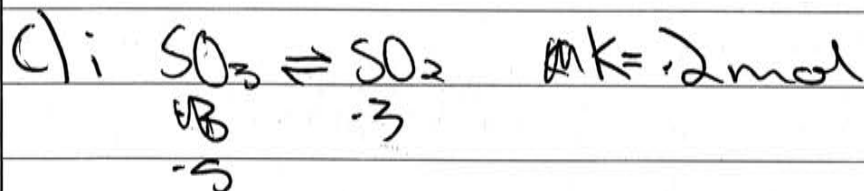


Start here.

a) Sodium hydroxide is produced from the process shown the main reactant is brine (concentrated saltwater) electrolysis is used to separate the chlorine from the brine and this is separated by a sodium amalgam which only lets particular elements ~~through~~ these ions through. it then goes into a decomposer and we are left with sodium hydroxide.

b) molten sodium chloride is different to getting sodium hydroxide in that sodium chloride is gained from salt pools where it is evaporated and then made more concentrated $\text{NaCl}^{2+} + 2\text{H}_2\text{O} \rightarrow \text{NaCl}^{2+} + 2\text{H}_2\text{O}$ for example which means it's twice as concentrated.



ii) more O_2 has been added in and it had to change its equilibrium constant to remain in equilibrium:

Start here.

d) i) polymerisation reaction, KNO_3

ii)

safety risks: goggles and gloves because glycerol is toxic and will effect sight.

it could be carried out using beakers and supervision.

e) limestone has a vast impact on the environment using the Solvay process. it causes impact in the air, thermal pollution and ~~the~~ habitat destruction.

Habitat destruction: limestone like all other rocks needs to be mined and transported to and from the factory. mining limestone causes ~~the~~ habitat destruction and also noise pollution. this happens by building a quarry where a forest once was. also rail road tracks must be built and this also effects habitats once it gets to its destination it needs to be stored aswell which equates to more destruction.

when limestone decomposes it puts carbon dioxide into the air which in turn when it rains makes acid this can change the pH of nearby rivers killing fish

but limestone is also a key factor in the solvay

process and steps are taken to reduce environmental impact eg. heat exchangers are being used to eliminate thermal pollution and recycle water.

Additional writing space on back page.