Question 32 2010 HSC Chemistry **Band 2/3** Sample 1 -1 -Start here. 1 DAB 0.37) The cell shown is the mercurry cell The brine enteres the electrolysis cell where the enode releasing of gas seperates the brine into its componenty The amalgum (Na/Hg) (Hybeing the albody runs off into the graphite decomposer where NaOH is extracted, Hz gas is released, and Aq descends thrugh the graphite package to be recycled b) The electrolysis of aqueous sodium electrolysis electricity through water cheride (Naci) would be much mahas Hz z akygen easier to perform than molten sodium chloride as aqueous means in the prossence of water, which electrolysis is easily done through NaCI + RE -> Nat + CI 100 de.

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Question 32	2010 HSC Chemistry - 2 -	Band 2/3 Sample 1
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Question 32 2010 HSC Chemistry **Band 2/3** -1 -Sample 1 Start here. Q.32 d. i) This is soaponification, an emulsion Reactant A is an acid ii) By miking cooking (vegetable) sil with an acid, such as H2SUL, in a hot water bath, a gluggy residue will be produced along with glycerd The diagram shows the experimental setup Stiring Rod Small - Beaber of oil and large backer of boiling Water with boiling Chips 100 - Stiring the acid/oil Solution for 10 minutes after boiling of water is achiard will form a solid precipitate residure. - After to minutes, extract ONLY the residue and dispose of any remaining solution. - linse with distilled water to extract it necessary - Dry the residue and a basic soop has been made.

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Question 32

2010 HSC Chemistry

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Sample 1 ZNacl + Cacoz -> tack Nh2 COz+Caclz e) The solvey process is a process of mixing sodium charide (NACI) and limestone (Cacoz) to produce large amounts of sodium carbonate (Na, Cally). Sodium carbonate is used as a dehydrating agent in domestic chaning products and industry. Environmental impacts of using limestone start at the trengtheginning with extraction. But Machinery used to extract limestone gives off oxides which are damaging to amophere. In production, small amounts of CO2 and NH (ammonia gas) are released. As solvay plants are located in cities and towns, this can be damaging to sensitive human and animal health anditions. This is closely monitered to maintain safe terels. Water used to cool the process on becomes bot and most be cooled before returning to water ways where damage an occur if hat headed. Whiste CarCiz is sold until sales are met, then remaining amounts are dumped into the ocean. Noise pollution to affects urban creas so land areas of the plant are insulated and scund proofed. The impertance of using limestone is to obstain the carbonate notcase to make Naz Coz. source as a first state of a state of the state of the state of Additional writing space on back page. Office Use Only - Do NOT write anything, or make any marks below this line.