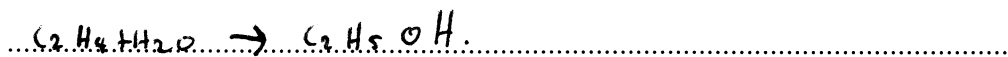


**Question 24** (4 marks)

In the margarine industry, alkenes are often hydrogenated to convert unsaturated oils into solid fats that have a greater proportion of saturated molecules.

- (a) Using ethene as an example, write an equation for this reaction and state the type of reaction this represents. 2



This is a hydration reaction.

- (b) Describe a test that could be used to confirm that all the ethene has been converted. 2

Mix in some more of the reactant. If there is still ethene present more product will form, if there is no ethene remaining then you will have excess reactant remaining.