

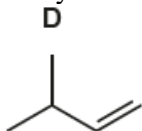
14.1 SATURATED HYDROCARBONS- SQs

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12.4 Classification of organic compounds

General methods of preparations

1. Give the structural formula of the compound formed when **D** reacts with $H_2(g)$ in the presence of a Pt catalyst. 1



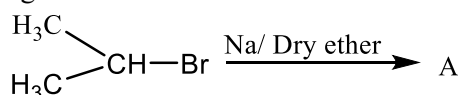
1. From haloalkanes

a. Reduction

2. How would you prepare Methane from Chloromethane? 1

b. Wurtz reaction

3. What is Wurtz's reaction? Give an example. 2
4. Write a chemical reaction when Bromoethane is heated with sodium metal in the presence of dry ether. 2
5. Identify A and give its IUPAC name



2

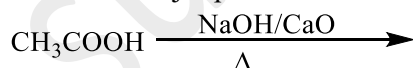
What product do you expect when 2-bromopropane is heated with Na/dry ether? 1

6. A haloalkane X if heated with sodium metal in the presence of dry ether, produces 2,3-dimethylbutane as the major product. Identify X and write the chemical reaction. 2
7. A Haloalkane 'X' undergoes a Wurtz reaction to give 2,3-dimethylbutane as the major product. Identify 'X' and write the chemical reaction. 2

2. From sodium salts of carboxylic acids

By soda lime decarboxylation

8. Write an example of a decarboxylation reaction. 1
9. What is the decarboxylation reaction? Give one example. 2
10. How would you prepare methane from Sodium ethanoate? 1
How would you prepare methane from CH_3COONa ? 1
What happens when **sodium acetate** is heated with soda-lime? 1
11. What products are obtained when CH_3COOH is allowed to react with $NaOH/CaO$? 1
12. Predict the major products of the following reactions:



13. Give a suitable method for the conversion of Ethanoic acid into methane.

Chemical properties

1. Substitution reactions

Halogenation

Nitration

Sulphonation

2. Oxidation (Combustion)

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