

Laboratory Report (109 chem)

Experiment 5: Hydroxy Compounds (Alcohols and Phenols)

Student Names: Section No:

Part (1): Primary alcohol

Name		Structure formula
class		
Functional group		
Molecular formula		

Tube no.	Test	Observation	Conclusion
1	<u>Preparation of Alkyl Halide from Alcohol:</u> 1 mL of Ethanol + 1 mL of Lucas reagent		
2	<u>Oxidation of alcohol:</u> 1 mL of Ethanol + 1 drop of KMnO_4 + heating for 1 minute		

Part (2): Secondary alcohol

Name		Structure formula
class		
Functional group		
Molecular formula		

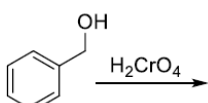

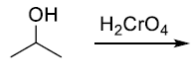
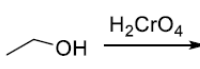
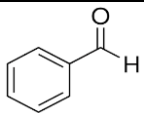
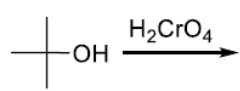
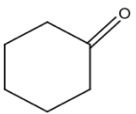

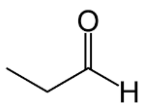
Tube no.	Test	Observation	Conclusion
1	<u>Preparation of Alkyl Halide from Alcohol:</u> 1 mL of Isopropanol + 1 mL of Lucas reagent + heating for 1-2 minutes		
2	<u>Oxidation of alcohol:</u> 1 mL of isopropanol + 1 drop of KMnO_4 + heating for 1 minute		

Part (3): Tertiary alcohol

Name		Structure formula
class		
Functional group		
Molecular formula		

Tube no.	Test	Observation	Conclusion
1	<u>Preparation of Alkyl Halide from Alcohol:</u> 1 mL of t-butanol + 1mL of Lucas reagent		
2	<u>Oxidation of alcohol:</u> 1mL of t-butanol + 1 drop of KMnO_4 + heating for 1 minute		

- Choose the correct product for the following chemical equation:

	Reactants		products
1.			
2.			No reaction
3.			
4.			
			
			

- How can we study phenol acidity and what is its pH range?