# Alcohols Lab Report

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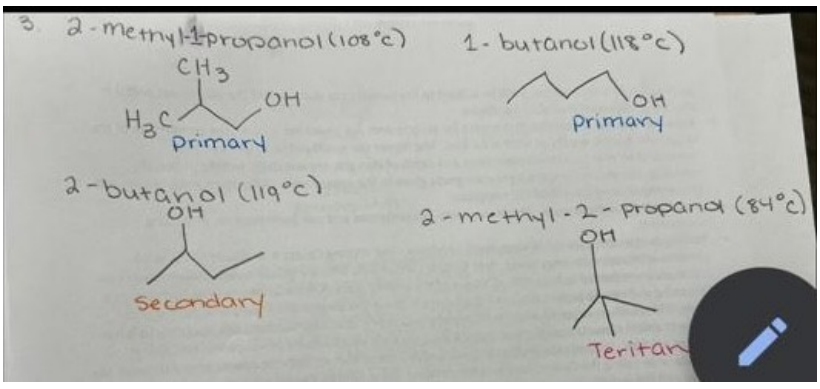
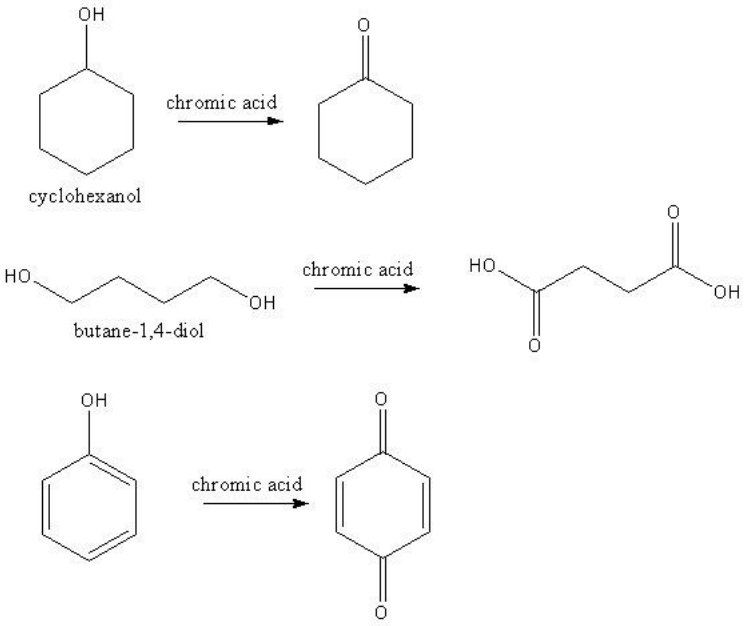
Introduction

In chemistry, alcohols are compounds that contain. A hydroxyl group attached to a carbon. A simple alcohol can be considered a hydrocarbon with an OH group attached. Alcohols illustrate the principle of structural isomerization, which is compounds that contain the same elements, but with different connections. The conversion of primary to secondary or secondary to tertiary involves exchanging the positions of one hydrogen atom and the OH group. Each of these molecules has different chemical properties. In this lab we analyzed different alcohols using three different reactions.

| Compound | Lucas Test | Chromic Acid | Iodoform |
|---|---|---|---|
| 1-butanol | + dissolved | + green | negative |
| 2-butanol | + cloudy | + green | Negative switch |
| t-butanol | + | + no color | Positive yellow |
| Unknown | + dissolved | + change green | Positive bright yellow precipitate |

1. After reviewing the results I obtained from this experiment I came to the conclusion that the unknown has the properties of a tertiary alcohol.
2. Other identification techniques I could've used are solubility and temperature to find out the melting point of the unknown.
3.




OH
chromic acid
O
cyclohexanol
HO
OH
butane-1,4-diol
chromic acid
HO
O
O
OH
OH
chromic acid
O
O

5.