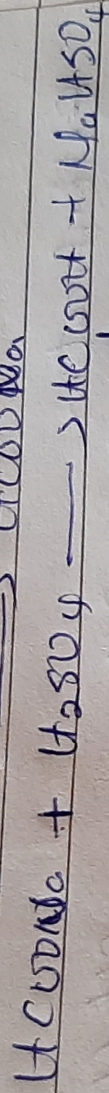
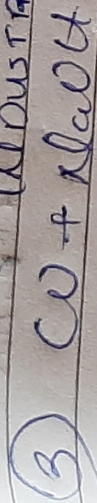


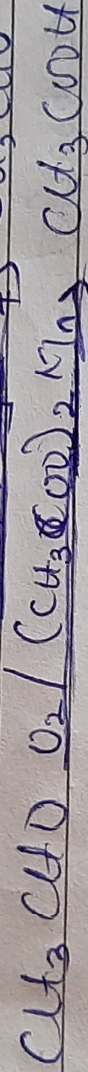
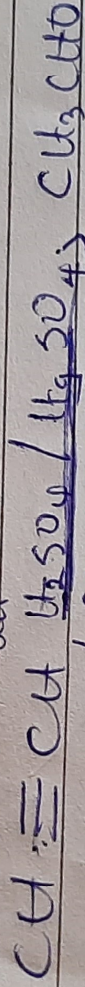
Solubility: Carboxylic acids with very low molecular mass as formic acid, acetic acid are soluble in water. This is due to the ability to form hydrogen bonds with the water molecules. Solubility decreases as the relative molecular mass increases.

INDUSTRIAL PREPARATION



Methanoic acid

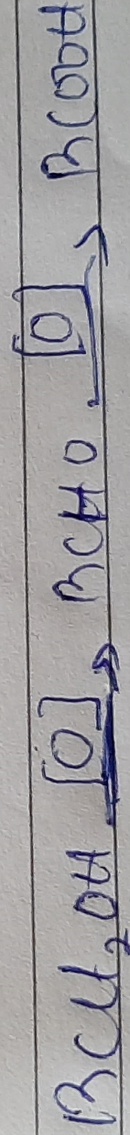
but



Ethanoic Acid

4) Synthetic Preparation

Oxidation of primary alcohols and aldehydes using KMnO_4 or $\text{K}_2\text{Cr}_2\text{O}_7$



ACID

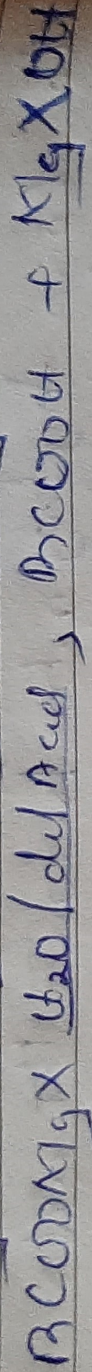
Name: Ashaka Mirabel Engyphene
Department: Medicine and Surgery
Matric No: 19/Mutsoi/104
Course Code: CHM 102
Assignment

- 1) HCOOH Methanoic acid
• $\text{HOOCCH}_2\text{CH}_2\text{CH}_2\text{COOH}$ Pentan-1,5-dioic Acid
• $\text{CH}_3\text{CH}_2\text{CH}_2\text{COOH}$ Butanoic Acid
• $\text{HO}_2\text{C}-\text{CO}_2\text{H}$ Ethanedioic Acid
• $\text{CH}_3(\text{CH}_2)_4\text{COOH}$ Hexanoic Acid
• $\text{CH}_3\text{CH}=\text{CHCH}_2\text{CH}_2\text{COOH}$ Hex-4-enoic Acid

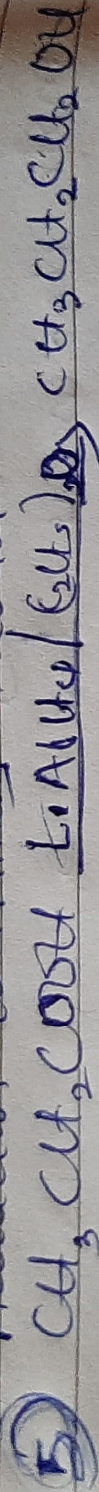
2) Physical Appearance: Carboxylic acids with 1-10 carbon atoms are liquids at room temperature. Carboxylic acids with higher carbon atoms than 10 are solids in temperature.

Boiling Point: the boiling points of carboxylic acids increase with increasing relative molecular mass.

• Carbonation of the Grignard Reagent



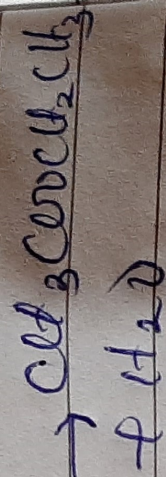
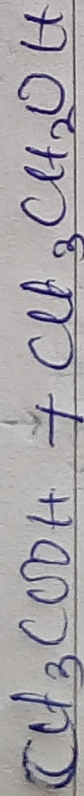
Reduction to Primary Alcohol



Propanoic acid

Propanol

Esterification



Decarboxylation

