

Name: Ogech Precious Chidiebere

Department: Nursing

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Assignment

① Classification of alcohols

It can be classified in two ways:

① This is based on the number of hydrogen atom attached to the carbon atom containing the hydroxyl group. Here you have the primary, secondary and tertiary alcohol. e.g CH_3OH (Methanol)

② This is based on the number of hydroxyl groups they possess. This is when you make use of monohydric alcohols, dihydric alcohols (glycols), trihydric alcohols (triols) and polyhydric alcohols. e.g $\text{HOCH}_2\text{CH}_2\text{OH}$ (Ethane-1,2-diol).

② The solubility of alcohols

Lower alcohols with up to three carbon atoms in their molecules are soluble in water because these lower alcohols can form hydrogen bond with water molecules. The water solubility of alcohols decreases with increasing relative molecular mass.

All monohydric alcohols are soluble in organic solvents. The solubility of simple alcohols and polyhydric alcohols is largely due to their ability to form hydrogen bonds with water molecules.

8 Convert Propan-1-ol to Propan-2-ol

