Contents

Physical properties of aldehydes and ketones

State of formaldehyde

Gas

State of lower members of aldehydes

Liquid

Number of carbon atoms upto which aldehyde exhibit liquid state

11

State of higher member of aldehydes

Solid

Smell of benzaldehyde

Bitter Almond

Smell of lower aldehyde

Irritating

Smell of higher aldehyde

Sweet

Smell of ketones

Sweet

Compound present in the umliblicial cord of musk deer

- Musmone
- Musmone is a ketonic compound.

Number of carbon atoms upto which aldehydes and ketones are miscible in all proportions

4

Cause of solubility of lower aldehydes and ketones in water

Hydrogen bond between solute and water in keto enol strucutre

Solubulity of higher member of aldehydes and ketones in water

Immiscible

Cause of immiscibility of higher member of aldehydes and ketones in water

Hydrophobic nature of higher alkyls

Approximation of boiling point of aldehdyes and ketones compared to hydrocarbon and ethers

Higher

Approximation of boiling point of aldehydes and ketones compared to alcohol and carboxylic acids

Lower

Cause of high boiling point of aldehydes and ketones compared to hydrocarbon and ethers

- Dipole induced dipole interaction bond is stronger than vanderwall's force

Cause of low boiling point of aldehydes and ketones compared to alcohol and carboxylic acid

- Hydrogen bond is stronger than dipole induced dipole interaction