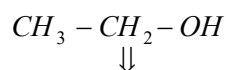


## Isomerism.

Compounds having same molecular formula but differing from each other at least in some physical or chemical properties or both are known as isomers (Berzelius) and the phenomenon is known as isomerism.

For example,

### Ethyl alcohol (C<sub>2</sub>H<sub>6</sub>O)



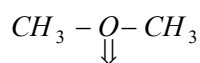
It is liquid.

Its boiling point is 78°C

It reacts vigorously with sodium and evolves hydrogen.

It reacts with HI and forms ethyl iodide, C<sub>2</sub>H<sub>5</sub>I.

### Dimethyl ether (C<sub>2</sub>H<sub>6</sub>O)



It is a gas.

Its boiling point is - 24°C.

It does not react with sodium.

It reacts with HI and forms methyl iodide, CH<sub>3</sub>I

The difference in properties of isomers is due to the difference in the relative arrangements of various atoms or groups present in their molecules. Isomerism can be classified as follows:

