KITE VICTERS ONLINE CLASS - 30-12-2020

Chemistry- X- Unit-5. Class - 31

Compounds of Non – Metals

Chemical properties of Sulphuric acid

While diluting sulphuric acid, the acid should be added to water in very small quantities, stirring it. If water is added to the acid, it will result in spurting and may cause burns to our body, as the reaction is highly exothermic.

Dehydrating nature

Take some sugar in a watch glass and add a few drops of concentrated sulphuric acid.

 $C_{12}H_{22}O_{11} \rightarrow 12C+11H_2O$

It transforms to to carbon.

It absorbs chemically combined water(H, O,) from sugar.

This process is called dehydration.

Concentrated sulphuric acid has the ability to absorb chemically combined water, or hydrogen and oxygen from substances in the ratio corresponding to that of water. This process is known as dehydration. Concentrated sulphuric acid is a strong dehydrating agent.

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Add Con. H_2SO_4 to a watch glass in which $CuSO_4$ crystals are taken. It's blue colour disappears. It is also an example of dehydration.

Drying nature

Drying agents are substances capable of absorbing the moisture present in a substance.

Concentrated sulphuric acid is used as a drying agent in the preparation of Cl_2 , SO_2 and HCl.

Questions

1. Write the chemical formula of sugar.

 $(C_{12}H_{22}O_{11}, C_6H_{12}O_6, CH_4)$

2. Take 20g of glucose powder in a watch glass and add few drops of $con.H_2SO_4$ in it. Write your observation .

3. Why is concentrated sulphuric acid not used as a drying agent in the preparation of ammonia?

Abdul Salam . HST. Govt. Model Higher Secondary School Vellamunda. Wayanad