

CHEMISTRY STUDY MATERIALS FOR CLASS 10

(NCERT Based: Revision of Chapter -01)

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Chemical Reactions and Equations

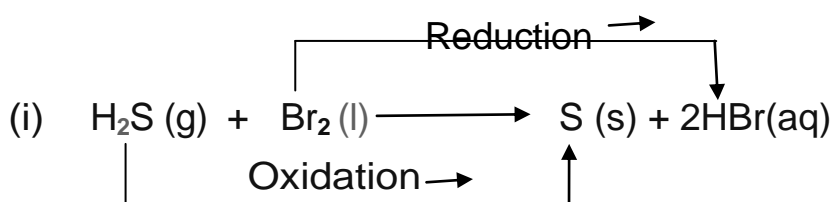
Oxidising Agent /Oxidants / Oxidisers:

The substance which gives oxygen for oxidation or removes hydrogen for reduction is called oxidising agent.

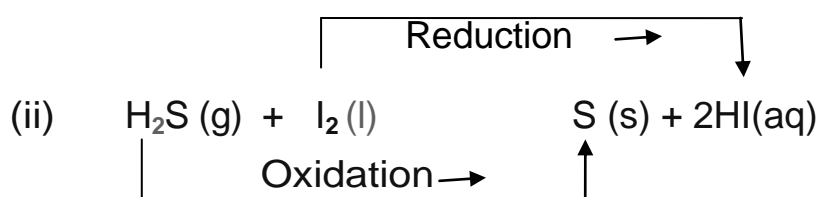
Reducing agent: /Reductant

The substances which is responsible for removing oxygen or gives Hydrogen for reduction called reducing agent.

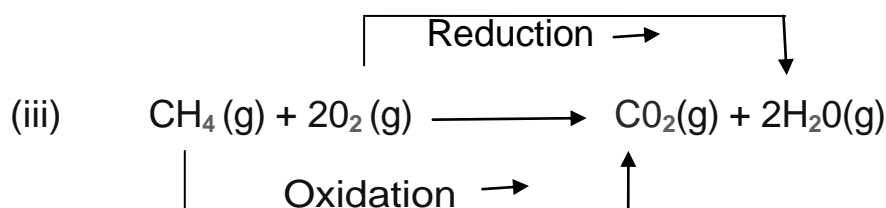
Examples of Redox reaction



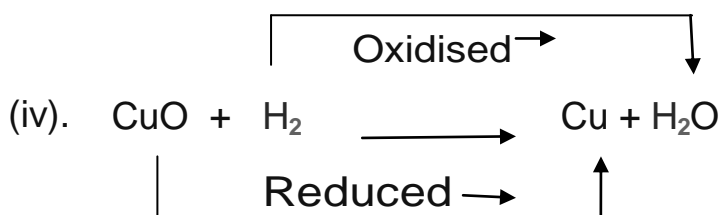
[Hydrogen sulphide gives/loses Hydrogen and gets oxidised while Bromine gains Hydrogen and gets reduced, therefore Hydrogen sulphide is a reducing agent and Bromine is an oxidising agent]



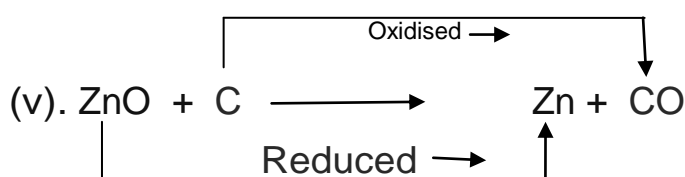
[Hydrogen sulphide gives/loses Hydrogen and gets oxidised while Iodine gains Hydrogen and gets reduced, therefore Hydrogen sulphide is a reducing agent and Iodine is an oxidising agent]



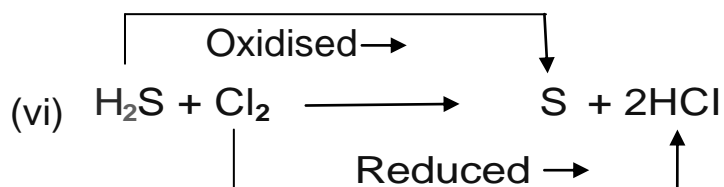
[Methane gives/loses Hydrogen and gets oxidised while Oxygen gains Hydrogen and gets reduced, therefore Methane is a reducing agent and Oxygen gas is an oxidising agent]



[Copper oxide gives/loses Oxygen and gets reduced while Hydrogen gas gains Oxygen and gets oxidised, therefore Hydrogen gas is a reducing agent and Copper oxide is an oxidising agent]



[Zinc oxide gives/loses Oxygen and gets reduced while Carbon gains Oxygen and gets oxidised, therefore Carbon is a reducing agent and Zinc oxide is an oxidising agent]



[Chlorine gas gains hydrogen and gets reduced while Hydrogen sulphide loses hydrogen and gets oxidised, therefore Hydrogen sulphide is a reducing agent and Chlorine gas is an oxidising agent]

Effects of oxidation reaction:

There are many reactions are going on around us in our everyday life in which corrosion of metals and rancidity of foods are common example due to oxidation reaction.
