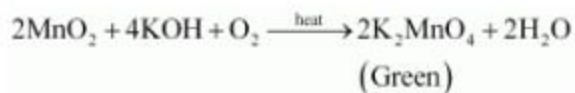


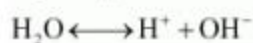
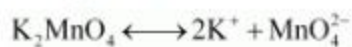
(ii)

Potassium permanganate (KMnO_4) can be prepared from pyrolusite (MnO_2). The ore is fused with KOH in the presence of either atmospheric oxygen or an oxidising agent, such as KNO_3 or KClO_4 , to give K_2MnO_4 .

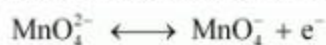


The green mass can be extracted with water and then oxidized either electrolytically or by passing chlorine/ozone into the solution.

Electrolytic oxidation



At anode, manganate ions are oxidized to permanganate ions.



Green Purple

Oxidation by chlorine



Oxidation by ozone

