

Exemplar Problems

Q5. Which of the carbonates given below is unstable in air and is kept in CO_2 atmosphere to avoid decomposition.

(a) BeCO_3

(b) MgCO_3

(c) CaCO_3

(d) BaCO_3

Sol: (a) Due to least electropositive character or least basicity of Be, BeCO_3 is less stable and hence decomposes to give BeO and CO_2 .



Since the decomposition reaction is reversible, therefore, to increase the stability of BeCO_3 or to reverse the above equilibrium, BeCO_3 is kept in an atmosphere of CO_2 .
