



THERMODYNAMICS (A)

Write a chemical equation that represents each of the following enthalpy changes.

- a enthalpy of formation of $\text{H}_2\text{O}(\text{l})$
- b enthalpy of combustion of $\text{C}_2\text{H}_6(\text{g})$
- c enthalpy of vaporisation of $\text{H}_2\text{O}(\text{l})$
- d enthalpy of atomisation of $\text{Br}_2(\text{l})$
- e lattice enthalpy of formation of $\text{MgCl}_2(\text{s})$
- f lattice enthalpy of dissociation of $\text{CaO}(\text{s})$
- g enthalpy of solution of $\text{MgCl}_2(\text{s})$
- h enthalpy of hydration of Mg^{2+} ions
- i bond dissociation enthalpy for N-H in NH_3
- j 1st electron affinity of oxygen
- k 2nd electron affinity of oxygen
- l 2nd ionisation enthalpy of magnesium