

III. *Enthalpy of Formation* 101-100

Enthalpy of formation of a compound is the heat evolved or absorbed when the compound is formed from its elements in their standard states at 25°C and 1 atm. The standard enthalpy of formation of a compound is denoted by ΔH_f° . The standard enthalpy of formation of an element in its standard state is zero.

IV. *Enthalpy of Combustion* 100-101

Enthalpy of combustion is the heat evolved when a substance is completely burned in oxygen under standard conditions.

V. *Enthalpy of Solution* 101-102

Enthalpy of solution is the heat evolved or absorbed when a substance is dissolved in a solvent under standard conditions. The standard enthalpy of solution is denoted by ΔH_{sol}° . The standard enthalpy of solution of a substance is the heat evolved or absorbed when one mole of the substance is dissolved in a large amount of solvent so that the concentration of the solution is 1 M.