Question # 78485, Chemistry / General Chemistry

Hess's Law states that _____.

A. the enthalpy of a given substance is independent of the way it was made

B. the enthalpy of a given substance depends on the way it was made

C. ΔH is the change in entropy that occurs in a chemical reaction

D. $\Delta Ho = \Sigma \Delta Hfo$ (reactants) $- \Sigma \Delta Hfo$ (products)

E. None of the Above

Solution: The law states that the total enthalpy change during the complete course of a
chemical reaction is the same whether the reaction is made in one step or in several steps.
Hess's law states that enthalpy changes are additive. Thus the ΔH for a single reaction

$\Delta Ho = \Sigma \Delta Hfo$ (products) $- \Sigma \Delta Hfo$ (reactants)

Answer: A

Source: https://en.wikipedia.org/wiki/Hess%27s_law

Answer provided by AssignmentExpert.com