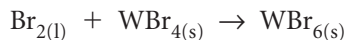


Predicting ΔH Using Hess's Law, Extra Exercises

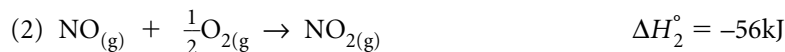
1. The enthalpy changes for the formation of two wolfram bromides are shown below.



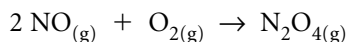
Calculate the standard enthalpy change for the following reaction.



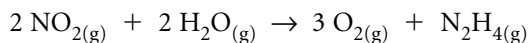
2. Given: (1) $\text{N}_2\text{O}_{4(g)} \rightarrow 2 \text{NO}_{2(g)} \quad \Delta H_1^\circ = +58 \text{ kJ}$



Calculate the standard enthalpy change for the following reaction.



3. Use the following reactions and enthalpy changes to predict the standard enthalpy change for

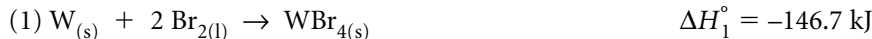


4. Use the following formation reaction evidence to calculate the standard enthalpy change for the complete combustion of cycloheptane.

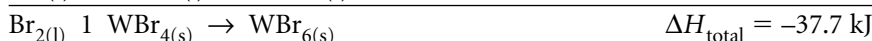
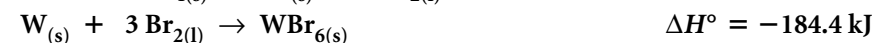


Predicting ΔH Using Hess's Law, Extra Exercises, Solution

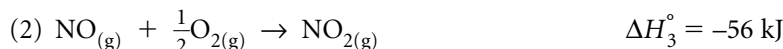
1. The enthalpy changes for the formation of two wolfram bromides are shown below.



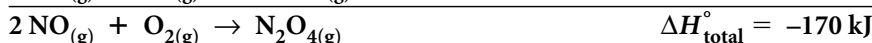
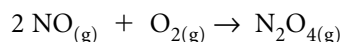
Calculate the standard enthalpy change for the following reaction.



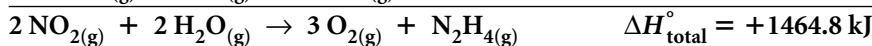
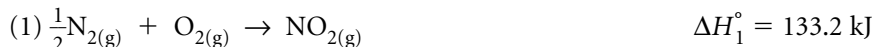
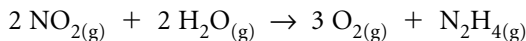
2. Given: (1) $\text{N}_2\text{O}_{4(g)} \rightarrow 2 \text{NO}_{2(g)}$ $\Delta H_2^\circ = 158 \text{ kJ}$



Calculate the standard enthalpy change for the following reaction.



3. Use the following reactions and enthalpy changes to predict the standard enthalpy change for



4. Use the following formation reaction evidence to calculate the standard enthalpy change for the complete combustion of cycloheptane.

