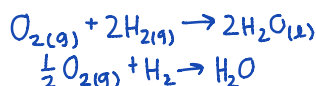
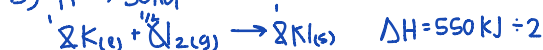


5.10 ΔH° Standard enthalpy of formation, reactants are @ standard state (O_2 is gas, etc)
forming 1 mole of product



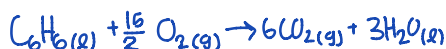
a) yes

b) $K \rightarrow$ solid



c) should be forming 1 mol of 1 product

5.11 & 5.12 $\Delta H^\circ_{rxn} = \sum n \Delta H^\circ_{products} - \sum m \Delta H^\circ_{react}$



$$\Delta H_{rxn} = [6(-393.5) + 3(-285.8)] - [1(49) + \frac{15}{2}(0)]$$

$$= \boxed{-3267 \text{ kJ}}$$

Spontaneous or not?

page 787



spontaneous in reverse

more movement in particles

19.3

$+\Delta S:$

$l \rightarrow g, S \rightarrow l$

molecules/moles increases $5A + 2B \rightarrow 10C$

increase in V, T



More disorder?



Look at states first



19.4

a) 1 mol HCl

b) 2 mol

c) HCl - 2 things

$-\Delta G^\circ$

$+\Delta S$

19.5 $\Delta G = \Delta H - T\Delta S$

$$\Delta H^\circ = \sum n \Delta H^\circ_{prod} - \sum m \Delta H^\circ_{react}$$

$$\Delta G^\circ = \sum n \Delta G^\circ_{prod} - \sum m \Delta G^\circ_{react}$$

$$\Delta S^\circ = \sum n \Delta S^\circ_{prod} - \sum m \Delta S^\circ_{react}$$

+E = spontaneous
-ΔG
+/- ΔH
+ΔS

Preview from Notesale.co.uk
Page 2 of 3