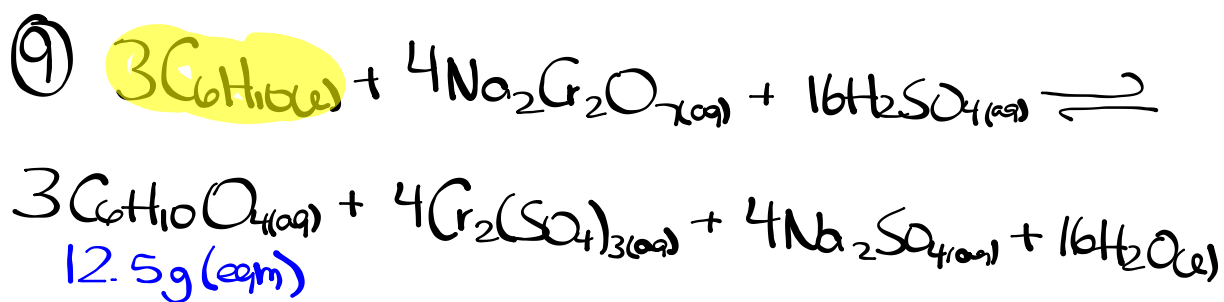


Unit 4 - Equilibrium

- What is an equilibrium?
- Percent Reaction / Percent Yield
- Equilibrium Law
- Le Chatelier's Principle

Equilibrium Review Worksheet



$$\% \text{ yield} = 68.6\%$$

$$\text{eqm. yield (C}_6\text{H}_{10}\text{O}_4) = 12.5 \text{ g}$$

$$\% \text{ rxn} = \frac{\text{exp.}}{\text{theor.}} \times 100\%$$

$$0.686 = \frac{12.5 \text{ g}}{\text{theor.}}$$

$$\text{theor.} = 18.22 \text{ g}$$

$$\text{a) } 18.22 \text{ g } \cancel{\text{C}_6\text{H}_{10}\text{O}_4} \times \frac{1 \text{ mol } \cancel{\text{C}_6\text{H}_{10}\text{O}_4}}{146.14 \text{ g } \cancel{\text{C}_6\text{H}_{10}\text{O}_4}} \times \frac{3 \text{ mol } \text{C}_6\text{H}_{10}}{3 \text{ mol } \cancel{\text{C}_6\text{H}_{10}\text{O}_4}} \times \frac{82.16 \text{ g } \text{C}_6\text{H}_{10}}{1 \text{ mol } \text{C}_6\text{H}_{10}}$$

$$= \boxed{10.2 \text{ g } \text{C}_6\text{H}_{10}}$$

$$\text{b) } \boxed{49.5 \text{ g } \text{Na}_2\text{Cr}_2\text{O}_7 \cdot 2\text{H}_2\text{O}}$$