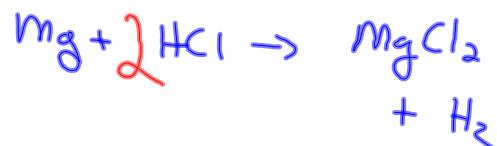


Limiting Reagent and Percent Yield

Examples of Limiting and Excess Reagents

Example: p. 370 # 26



LIMIT

6 g HCl	1 mole HCl	1 mole MgCl <sub>2</sub>	= .083 mole MgCl <sub>2</sub>
5 g Mg	36 g HCl	2 mole HCl	= .208 mole MgCl <sub>2</sub>
24 g Mg	1 mole Mg	1 mole MgCl <sub>2</sub>	Excess MgCl <sub>2</sub>

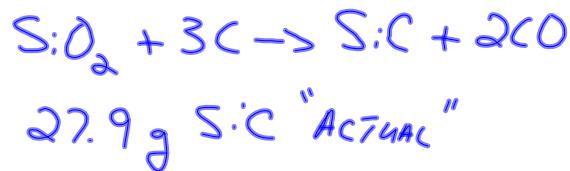
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Percent Yield Formula

$$\% \text{ Yield} = \frac{\text{Actual Yield}}{\text{Theoretical Yield}} \times 100$$

Example: p. 375 # 31



50 g SiO <sub>2</sub>	1 mole SiO <sub>2</sub>	1 mole Si:C	40 g Si:C	= 33.3 g Si:C
	60 g SiO <sub>2</sub>	1 mole SiO <sub>2</sub>	1 mole Si:C	THEORETICAL

$$\% \text{ YIELD} = \frac{27.9 \text{ g}}{33.3 \text{ g}} \times 100 = 83.7\%$$

Sep 25-9:17 AM

Sep 25-9:18 AM

Sep 25-9:18 AM

Dec 21-7:33 PM