

Lab Calculations-Vinegar

3. $\frac{1.0 \text{ mol}}{1 \text{ L}} \times 0.00068 \text{ L} = 0.00068 \text{ mol NaOH}$

5. $0.00068 \text{ mol NaOH} \times \frac{1 \text{ mol CH}_3\text{COOH}}{1 \text{ mol NaOH}} = 0.00068 \text{ mol CH}_3\text{COOH}$

6. $[\text{CH}_3\text{COOH}] = \frac{0.00068 \text{ mol}}{0.00087 \text{ L}} = 0.78 \text{ mol/L}$

0.78
0.75
0.91
0.82

Ave. 0.82 mol/L

?% = ? g
100 g
CH₃COOH

$\frac{0.82 \text{ mol}}{1 \text{ L}} \times 0.10 \text{ L} \times \frac{60.06 \text{ g}}{1 \text{ mol}} =$

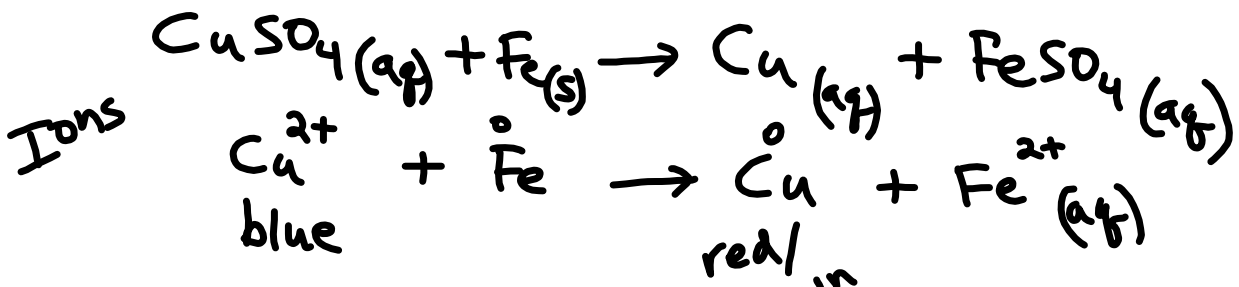
$= 4.9 \text{ g/100g or } 4.9 \%$

24.02
4.04
32.00
molar mass → 60.06 g

Identifying Oxidation and Reduction Reactions

In some chemical reactions, particles change their charge by losing or gaining electrons.

Demonstration-



a) Fe lost $2e^-$ - oxidation

LEO
loss electr. oxidation

b) Cu²⁺ gained $2e^-$ reduction

GER
gain e⁻ reduction

Writing Half Reactions

Recall-



Oxidation

Half reaction



Reduction

Half reaction



Questions -
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