

Lesson 88: Molecular Formulas Lab

Chemistry with Lab

Mass of empty pipet	
Mass of hydrate and pipet	
Mass after 1 st heating	
Mass after 2 nd heating	

Calculations:

1. Using the data, calculate the mass of the water driven off.
2. Using your answer to number 1, calculate the number of moles of water driven off.
3. Using the data, calculate the mass of the "anhydrous" salt.

Lesson 88: Molecular Formulas Lab (cont.)

Chemistry with Lab

4. Using your answer to number 3 and the fact that your “anhydrous” salt is copper (II) sulfate, calculate the number of moles of “anhydrous” salt.
5. Using your answers to numbers 2 and 4, determine the formula of the hydrate.

Conclusions:

1. A hydrate is a crystal with _____ molecules adhering to the ions or molecules.
2. Define “anhydrous.”
3. Write the formula for hydrated zinc sulfate with 7 molecules of water adhering to each formula unit of zinc sulfate.