

Data and Calculations for Experiment 9**A. Qualitative Determination of the Released Liquid**

1. Record observations regarding the solid before, during, and after heating the copper(II) sulfate pentahydrate.
2. Compare and record observations after adding liquid to the anhydrous cobalt(II) chloride test strips.
3. Compare and record observations after adding liquid to the residue on the watch glass.
4. What conclusions can you draw from the above observations?
5. Write the balanced chemical equation for the decomposition of copper(II) sulfate pentahydrate, include phases.

B. Quantitative Determination of Mass Lost in a Hydrate*Sample number:* _____

1. Mass of crucible and cover _____
2. Mass of crucible, cover and sample _____
3. Mass of crucible, cover and sample after heating _____
4. Mass of sample after final heating _____
5. Mass of original sample _____
6. Total mass lost by sample _____
7. Percentage of water in sample _____

Name: _____

Section: _____

8. Ask your instructor for the name of the anhydrous salt of your residue and solve for the formula and name of your original unknown hydrate.

Formula: _____ Name: _____

9. Is it possible that the decrease in mass from heating is something other than water?
Yes or No Explain and include an example.