Assignment #1

Pre-lab outlines for Experiments 1 & 2 ................................................................. 0.1

Data and observations for Expts. 1 & 2 (notebook pages) .............................. 0.2

Results from Expt. 1 ........................................................................................................ 0.1

Results from Expt. 2
  Melting points and identification of unknown ............................................ 0.1
  Melting point and recovery of cholesterol ................................................. 0.1

Discussion (1-2 pages) ................................................................................................. 0.4

  Discuss the objectives, observations, principles and error sources for Experiments 1 and 2. Include the following:

  • Discuss the percent recovery that you obtained for phthalic acid.

  • Compare the calculated volume of water with the volume of water actually used to dissolve the phthalic acid.

  • Suggest suitable solvents or solvent pairs for recrystallization of resorcinol and benzoic acid.

  • How do your observations in Part 2 of Experiment 1 (Solubility Tests) conform to the generalization that like dissolves like? Incorporate any relevant information that you obtained from the Spartan molecular modeling program into your explanation.

  • Explain how your melting point results led to the identification of your unknown in Part 1 of Experiment 2.

  • How pure is the cholesterol that you obtained? Provide evidence for your answer.

  • Discuss the percent recovery that you obtained for cholesterol from gallstones.

  The discussion section of the report must be typed, and the length of the discussion section **must not exceed two pages**. Use double-spacing, a one inch margin on the top, bottom and sides of the page, and a standard font (Times, Palatino, Arial, Helvetica) with a size that is not smaller than 12 point. If your discussion section exceeds two pages in length, your TA will not read past the second page when grading the report.