

Crystallization

Reading Experiment 3C in Pavia. Read the procedure for 3A and see the Required Reading for the experiment (i.e., read through Techniques 8, 9, 10, and 11 in Pavia *before performing the experiment*).

General

Crystallization is the most common method used to purify solid organic chemical compounds. The purpose of this experiment is to learn the basic procedures involved in performing this essential type of purification.

Prelab

Include your **Name**, **Date**, and **Title** for the experiment, a **Purpose**, and a brief **Outline** of the essential procedure for each part. Include an **Observations and Data** section to give details about the experiment such as volumes, weights, mp's, etc. (for Part C). Show the structures and names of the compound to be purified in Part C and the impurity that it contains (read the footnote at the bottom of the page 48). Also show the melting points for these compounds. Include the Pre-lab calculations 1 and 2 from p. 24 in your prelab (before the Observations and Data section). (Note that this calculation pertains to Part A of the experiment, which you are not performing)

Procedure

Follow the procedure for Part C, but use the method described in Part A to perform the actual crystallization once you have chosen the best solvent. Note your observations (color of samples, weights, melting points, etc.) as you proceed with each part *directly into your notebook*.

You will turn in your final purified product in a sample vial with a label that contains the following (standard) information:
Name of compound, melting point, weight of sample, % yield
Your name, Date of experiment

To Complete the Experiment – Partial Report and Template

For your **Conclusion**, answer questions 1-3 in the Report section for Experiment 3C (p. 32-33) and fill in the other required information in the template from the class website. Remember to download the template first, then fill in, then print.

Turn in the completed items in the following order: Completed and printed template, then notebook pages, with the last page signed by instructor and the student.