

Isolation of Caffeine from Tea

Reading Experiment 13 in Pavia (Part A, and analysis of caffeine by IR spectroscopy, pg. 107). See the Required Reading for the experiment on pg. 102.

General

The caffeine contained in a “cup” of brewed black tea will be isolated using extraction. The identity of the isolated compound will be verified using infrared spectroscopy and melting point.

Prelab

Include your **Name**, the **Date**, a **Title** for the experiment, an **Objective Statement**, and a brief **Summary** of the essential procedures.

Procedure

Follow the procedures for Part A, but **we will not perform the sublimation step**. You should obtain the mass of the isolated caffeine, the melting point, and record an IR spectrum using the KBr pellet method (see page 2 of the IR Sampling handout) Note your observations as you proceed with each part *directly into your notebook*.

To Complete the Experiment – Partial Report

The results from this experiment will be combined with the *HPLC Analysis of Caffeine* experiment as a Partial Report – the details are in the handout for that experiment.