CHEM 3100 Lab 6: Catalytic Hydrogenation of An Alkene Fall 2006

Before lab, review safe handling of chloroplatinic acid and sodium borohydride by perusing the MSDS for each reagent.

Follow the procedures listed in Mayo, experiment 12, with the following exceptions:

In the reagents and equipment section, instead of adding 120 μL of 1-octene dissolved in 250 μL ethanol, add 370 μL of vegetable oil (no ethanol).

In the isolation of product section, after adding 1 mL of water dropwise, add an additional 1 mL water prior to extraction. Dry the extracted vegetable oil over sodium sulfate. Transfer the dried extraction to a tared 5 mL conical vial with a spin vane, and evaporate the pentane from the vegetable oil. Allow the vial to cool, and observe the consistency of the remaining oil. Find the mass of the vial, and calculate the mass of the recovered oil. Find the mass of 370 μL of vegetable oil, and calculate a percent yield for the reaction.