Acetylsalicylic Acid (Aspirin)

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Purpose: To learn how to make an ester, in this case, preparing Aspirin.



Experiment: I got 274 mg of Salicylic Acid, two drops of H3PO4, and 20 drops of Acetic Anhydride into a test tube. I heated the mixture in a hot water bath at 90 °C for five minutes. O decompose the excess Acetic Anhydride, I added .4 mL of water into the mixture. Then I added another .6 mL of water and allowed the tube to reach room temperature; afterward, I placed the tube into ice to recrystallize the mixture, extracting the solvent. After mixing and extracting the excess liquid, I put the solid into the Hirsch Funnel. After drying the solid, I got the mass to be 234 mg, thus getting a 34.5% yield. The melting point came out to be 136.7 °C.

