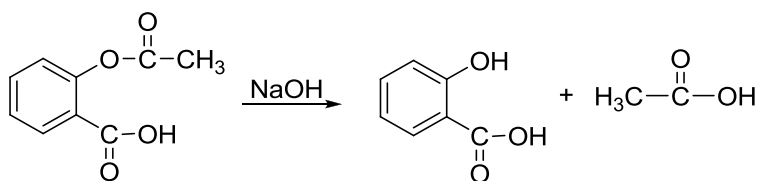


ASPIRIN HYDROLYSIS

Reaction Equation:



Required items:

Aspirin

10% NaOH

Dilute H₂SO₄

Experimental Procedure:

- Place 0.5 g aspirin in a balloon.
- Add 10 mL of a 10% NaOH solution.
- The reaction mixture is boiled in a water bath under refluxing for 45 min.
- After the reaction is finished, the mixture is cooled to room temperature.
- The mixture is neutralized by adding dropwise diluted H₂SO₄. Neutralization is controlled by pH paper.
- Take the tare of flat filter paper, the precipitate formed is filtered and dried.

Product M.P. and Yield: 158-161 ° C, 85%

Questions

1. How is the chemical reading of aspirin?
2. How is the mechanism of the hydrolysis reaction? Describe it by typing.
3. Why is the neutralization with dilute H₂SO₄ done?