

Laboratory Report

Mass of Salicylic Acid	
Mass of Filter Paper and Watch Glass	
Mass of Watch Glass, Filter Paper, and Aspirin Product	

Properties of Aspirin	Salicylic Acid	Aspirin Product	Aspirin Tablet
Melting Point			
Fe ³⁺ Observations (Color of solution)			
Thin Layer Chromatography	Spot distance		
	Solvent front distance		
	R _f value (calculated)		

- Calculate the number of moles of salicylic acid used in this experiment.

- Calculate the maximum amount of acetylsalicylic acid in grams that may be obtained from this amount of salicylic acid. This is the theoretical yield. **Hint:** See *Pre-Laboratory Questions 3–5*.

- Determine the mass of aspirin obtained in this experiment and calculate the **percent yield**.

- Iron(III) ions are used as a qualitative test for **phenols** (aromatic compounds containing an –OH functional group). (a) What compound was used as a **positive control** for the Fe³⁺ test in this experiment? (b) Did the reaction product give a positive or negative test result with Fe³⁺ ions? Explain.

