

# Identifying a constituent of "panacetin" essay



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The Consulting Chemists Institute has been asked to analyse the drug readying of Aspirin to happen out what per centums of acetylsalicylic acid. saccharose. and drug readying. The intent of this experiment was to find the unknown constituent of panacetin. Panacetin contains acetylsalicylic acid. saccharose. and an unknown constituent. Dichloromate reacts with Panacetin to bring forth the saccharose as an indissoluble solid. Aspirin is removed from the solution by responding with Na hydrogen carbonate. The aqueous bed reacts with hydrochloric acid. the unknown constituent can so be isolated by vaporizing the dissolver from the methylene chloride solution.

Observations and Datas: Aspirin reacted with Sodium Bicarbonate to organize salt. Na acetylsalicylate. The reaction caused fizzing and gas. When hydrochloric acid was added to sodium acetylsalicylate the solution bubbled. sizzled. and gave off heat. All precipitates were white.

SubstanceMassPanacetin3. 00gAspirin0. 849gSucrose0. 212g ( weighed moisture )Unknown1. 995 ( burned )

Consequences and Discussion: The consequences I got were near to the expected consequences. During the Isolation of the Unknown constituent. H<sub>2</sub>O splashed on our sucrose sample before we could weigh it and we burned the unknown. skewing the multitudes. However. there could hold been uncomplete blending with methylene chloride. uncomplete extraction of precipitation of acetylsalicylic acid. uncomplete drying of the cured constituents. or losings from reassigning substances from one container to another.

Calculations: % Recovery = amount of the multitudes of all components/mass of panacetin started with  $0.212\text{g} + 0.849\text{g} + 1.995\text{g} / 3.01\text{g} = 101\%$

% Composition = ( Amount of Component/Sum of the multitudes of all constituents ) \*100

% Composition of Sucrose =  $( 0.212\text{g} / 3.056\text{g} ) * 100 = 6.9\%$   
% Composition of Aspirin =  $( 0.849\text{g} / 3.056\text{g} ) * 100 = 27.8\%$   
% Composition of Unknown =  $( 1.995\text{g} / 3.056\text{g} ) * 100 = 65.3\%$

Experimental: 3.01g of Panacetin was dissolved in 50mL of methylene chloride. The mixture was put through gravitation filtration. Sucrose was set aside. The filtrate was so put through a separatory funnel and set into two 30mL parts of 5% Na hydrogen carbonate. 11mL of 6M hydrochloric acid was easy added to the mixture. The mixture was cooled for 10 proceedings and acetylsalicylic acid was collected via vacuity filtration. A filter flask attached to a trap and aspirator was used to vaporize the dissolver from the methylene chloride solution. All precipitates were white and crystalized.