

Effect of ph on food preservative assignment



**ASSIGN
BUSTER**

Safety goggles were worn and care was taken to ensure that none spilled onto skin or clothes. Hydrochloric acid is a strong acid and is very corrosive. Care was taken not to get any on clothes, skin, or into eyes.

Observations/Results After the sodium benzoate was mixed into the water and the HCl was added, the solution underwent a color change from a clear substance to a white substance. Also, a precipitate began to form. This precipitate was a dry, white solid with a mass of .754 g.

Discussion/Conclusion My results seem to be a little askew.

While the experiment was done correctly and the calculations correct, not enough of the product was transferred from the flask to the filter to the vial. Had a greater amount have been transferred, the results would have reflected a well done experiment. In the end, pH affected the food preservative sodium benzoate by turning it into benzoic acid under stomach conditions. Exercises 1 . There were a couple differences between sodium benzoate and benzoic acid that were observed. The first was a color change in the solution as HCl was added to sodium benzoate.

The second change was that a solid precipitate was formed after mixing in HCl to the sodium benzoate. 2. In the reaction between sodium benzoate and hydrochloric acid that yields benzoic acid and sodium chloride, the stronger acid is hydrochloric acid whereas the weaker acid is benzoic acid. The stronger base is sodium benzoate and the weaker base is sodium chloride. 4. a. If aqueous NaOH were added to the solution to raise the pH, sodium benzoate and water would form. Sodium chloride would dissociate and the hydrogen from benzoic acid would attach to the OH to form water and the positive Na ion would bond to the benzoate anion.