

General Chemistry 2

Amorde, Fall 09

Bonus #3

One of the original pain relievers was a natural product isolated from the bark of a willow tree, salicylic acid. Due to the acidic nature of the compound, the side effects were often worse than the pain. Draw the structure of salicylic acid and compare the pK_a 's for salicylic acid and acetylsalicylic acid (aspirin).

Bufferin[®] was a solution to this dilemma, bufferin is a buffered tablet of aspirin.

Design your own bufferin pain reliever pill, your pill must contain the normal dose of acetylsalicylic acid and be buffered to a pH of 7 using the conjugate base of acetylsalicylic acid.

Is this pill practical?