

Example 6.2

Penicillin F has an intrinsic K_i of 131 in amyl acetate-water and a pK_A of 3.51. What is the partition coefficient of penicillin F as a function of pH (range 2-7)?

Example 6.3

In a particular organic solvent-water system, compound "A" has a K_i of 35 and a pK_A of 3.22 while compound "B" has a K_i of 20 and a pK_A of 2.55. At what pH should the extraction be conducted to obtain the best purity and selectivity?