

Questions:

1. Recrystallization of enantioenriched solid A (1.0g, 75% ee) gave crystals of A (0.5g) with 95% ee. What is the ee of compound A in the mother liquor after recrystallization?
2. What is the maximum theoretical yield of the diastereomeric salt (++) could be obtained when considering kinetic resolution of a ( $\pm$ )-acid A with amine (+)-B which is only 96% ee?
3. Is n-butane chiral? If no, why?
4. Draw the conformers for propionaldehyde and 1-butene? Comment on their stability