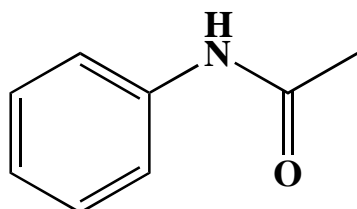


AS WITH DISTILLATION, IN A RECRYSTALLIZATION, SOME MATERIAL IS SACRIFICED FOR THE SAKE OF PURITY.

AN EXAMPLE:



ACETANILIDE

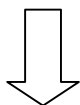
SOLUBILITY IN WATER:

5g/100 mL at 99° C

0.5 g/100 mL at 10° C

- LET'S DO A RECRYSTALLIZATION.

- ADD 5 g OF ACETANILIDE TO 100 mL OF WATER AND HEAT TO NEAR THE B.P OF THE SOLUTION. ALL OF THE SOLID DISSOLVES.



- LET IT COOL TO 10°

- 4.5 g CRYSTALLIZES OUT AND 0.5 g REMAINS IN SOLUTION. IF WE COLLECT THE CRYSTALS, WE GET 4.5 g.

IN OTHER WORDS, 90% RECOVERED AND 10% LOST