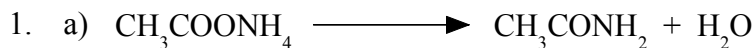
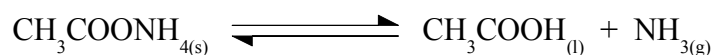


Chemguide – answers

AMIDES: PREPARATION

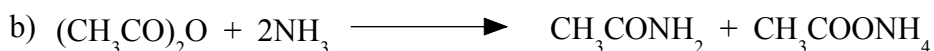
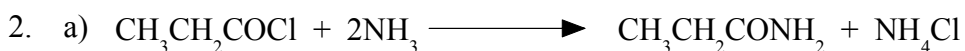


b) Ammonium ethanoate dissociates on heating in a reversible reaction to give a mixture of ethanoic acid and ammonia.



Because ammonia is a gas, this would escape if ammonium ethanoate was heated, and the ammonium ethanoate would no longer exist to split up to make ethanamide. Excess ethanoic acid pushes the position of the equilibrium to the left, and helps to prevent this from happening.

c) It remains in the reaction flask.



(In these equations, you could show the ammonium ethanoate or ammonium chloride as ionic, but in a simple equation of this sort, it really isn't necessary unless you are specifically asked to show it that way. In 2(b), if it helps you to show the structure of the ethanoic anhydride in more detail, then do it.)