p-Bromoaniline



Add a mixture of concentrated hydrochloric acid (25 ml) and water (75 ml) to *p*-bromoacetanilide (5 g, 23.3 mmol)¹ in a round bottomed flask (250 ml) equipped with a reflux condenser. Heat the mixture until reflux for 30 min². Set the pH of the resulting mixture to basic by addition of 20% sodium hydroxide solution (ca. 50-60 ml)³. Separate the crude product from the basic mixture by steam distillation⁴. Dry the crude product (ca. 2.4 g, 60 %) in air⁵.

Notes

- (1) This description is based on the assumed average yield of the previous step. Therefore, the amounts of the necessary components for the actual reaction should be recalculated according to the actual amount of the starting *p*-bromoacetanilide. Because the reaction is a transformation of a heterogeneous suspension, the particle size of the starting compound plays an important role. For reaching a proper reaction rate, finely powdered starting material should be used.
- (2) As during this reaction a compound of limited water-solubility is converted to a water soluble product, the change of the suspension to homogenous solution indicates the completeness of the reaction.
- (3) The pH of the mixture should be above 10. Below this value, a substantial amount of the product can remain ionized and thus significant loss of the product in steam distillation might happen.
- (4) Apply an Y-shaped joint equipped with a reflux condenser as usual for steam distillation of solids.
- (5) Melting pint of the product should be determined after air-drying at room temperature (at least 24 h).