Chemguide - answers

AMINES: REACTIONS WITH NITROUS ACID

- 1. Acidify the amine with dilute hydrochloric acid and then add sodium or potassium nitrite solution.
- 2. a) Primary amine: You would get a burst of colourless, odourless gas.

Secondary amine: You get a yellow oil produced (but no gas).

Tertiary amine: You just get a colourless solution

b)
$$CH_3CH_2NH_2 + HNO_2$$
 \longrightarrow $CH_3CH_2OH + H_2O + N_2$

The compound formed (a nitrosamine) is very carcinogenic.

d) $(CH_3)_3NH^+$