

23 Which statement is correct?

- A** Nitrogen is unreactive due to the absence of lone pairs in the molecule.
- B** Aqueous ammonia contains both $\text{NH}_3(\text{aq})$ and $\text{NH}_4^+(\text{aq})$. The $\text{NH}_4^+(\text{aq})$ ion is a Brønsted–Lowry acid.
- C** High temperatures are needed to supply the energy to break the strong double bonds in nitrogen molecules when they react.
- D** Atmospheric SO_2 reacts with unburnt hydrocarbons to form a component of photochemical smog.