

precipitate colours: Cl → white Br → cream I → yellow

To analyse a mixture of ions → specific order: Carbonate → Sulfate → halide.

↳ a different order = conflicting results:

↳ carbonate ions produce a precipitate in the sulfate and halide tests.

→ sulfate ions make a precipitate w/ halides

Testing for Cation

↳ 1. Ammonia test:

NH_4^+ in solution → to test for presence:

→ + NaOH(aq) to the solution and warm the solution → test for any gas evolved w/ damp red litmus paper → if the litmus paper turns blue → the gas is ammonia ∴ NH_4^+ is present

aqueous ammonia and aqueous hydroxide ion:

