The identification of unknown compounds X and Y Transcript

Watch the following tests and identify the cations and anions for the two unknown compounds: X and Y.

As the two unknowns have been mixed they need to be separated first.

Compound X is soluble, whereas compound Y is not.

Compound **X** produced a negative result for the test with aqueous barium nitrate.

Compound **X** was then tested with acidified silver nitrate.

No precipitates were observed upon the addition of aqueous sodium hydroxide and aqueous ammonia.

A solution of compound **X** was then gently heated.

Can you identify compound X from these observations?

A small amount of compound Y dissolved in excess distilled water and was divided into portions.

The first portion was tested with aqueous sodium hydroxide. Compound **Y** was not tested with aqueous ammonia.

A small sample of compound **Y** was tested with a Bunsen flame.

Compound **Y** gave negative results for the following tests.

Compound **Y** was then tested with hydrochloric acid and heated gently.

A pungent smelling gas was given off and tested with potassium manganate.

Can you identify compound Y from these observations?

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