

The identification of unknown compounds L and M Transcript

Watch the following tests and identify the cations and anions for the two unknown compounds: **L** and **M**.

First, two aqueous solutions containing compound **L** were prepared.

To the first solution of compound **L**, aqueous sodium hydroxide was added.

To the second solution of compound **L**, aqueous ammonia was added.

Here are the results from the aqueous sodium hydroxide and aqueous ammonia tests.

A solution of compound **L** was then tested with acidified silver nitrate but provided a negative result.

Another solution of compound **L** was then acidified with nitric acid and reacted with barium nitrate.

Can you identify compound **L** from these observations?

Solutions of compound **M** were prepared for identification.

No precipitates were observed on the addition of aqueous sodium hydroxide or aqueous ammonia.

A small sample of compound **M** was then placed into a Bunsen flame.

A solution of compound **M** was then tested with acidified silver nitrate but gave a negative result.

Another solution of compound **M** was tested using sodium hydroxide and aluminium foil, and was gently heated.

The gas produced was tested with damp red litmus.

Can you identify compound **M** from these observations?

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