Checking an Unknown Salt With Two Tests

Scoring guide · one credit per question · review written work against each rubric

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Question 1

Choice (3)

Only sodium sulfate has that pair of responses among the listed pure references.

Question 2

Both contain chloride and lack sulfate. The tests have identical results for these two salts, and neither measures whether sodium or potassium is present.

Question 3

For example, sodium chloride and sodium sulfate supply chloride and sulfate respectively. Potassium chloride and sodium sulfate also fit. One salt must supply chloride and the other sulfate.

Question 4

A potassium-specific test would distinguish them. Both mixtures already contain sodium sulfate, so only the mixture with potassium chloride contains potassium. A test for sodium alone would give the same result in both.