

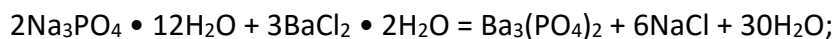
## Answer on Question #71551 - Chemistry - General Chemistry

Question:

Describe how to test your unknown salt mixture for the presence of excess  $\text{Na}_3\text{PO}_4 \cdot 12\text{H}_2\text{O}$

**Solution:**

To test the solution for an excess of sodium orthophosphate ( $\text{Na}_3\text{PO}_4$ ), add barium chloride dihydrate to the system ( $\text{BaCl}_2 \cdot 2\text{H}_2\text{O}$ ). If sodium orthophosphate was present in the initial solution, a white amorphous precipitate forms during the reaction with barium chloride. The chemical reaction is:



$\text{Ba}_3(\text{PO}_4)_2$  – the compound is an amorphous white powder that is poorly soluble in water.

Answer provided by AssignmentExpert.com