

Hydrolysis of Salts Worksheet

Results Table

Petri Dish	Salt	Solution Color	pH	Acid, Base, or Neutral
1	Aluminum chloride			
2	Ammonium chloride			
3	Sodium chloride			
4	Sodium bicarbonate			
5	Sodium phosphate			

Discussion Questions

- Explain what happened to the salts in the water and what caused the acid–base properties of the solutions.

- Salt hydrolysis can be described in two chemical equations, the first showing the dissociation of the salt, and the second net equation showing the production of H^+ or OH^- ions. Write the two equations for each salt in this demonstration. If neither H^+ nor OH^- ions are produced, write “no reaction” for the second equation.
 - $\text{AlCl}_3 \cdot 6\text{H}_2\text{O}(\text{s}) \rightarrow$

 - $\text{NH}_4\text{Cl}(\text{s}) \rightarrow$

 - $\text{NaCl}(\text{s}) \rightarrow$

 - $\text{NaHCO}_3(\text{s}) \rightarrow$

 - $\text{Na}_3\text{PO}_4(\text{s}) \rightarrow$