SCIENCE 9
HYDROLYSIS LAB

INTRODUCTION: When certain salts are dissolved in water, the resulting solutions are slightly acid. Others form solutions that show slightly basic properties. This is known as Hydrolysis of Salts.

In this lab you will test a number of salts to determine which type of salt it is and you will also determine which acid and base were used to make the salt.

DATA TABLE

<table>
<thead>
<tr>
<th>SALT USED</th>
<th>LITMUS CHANGE</th>
<th>LITMUS CHANGE</th>
<th>TYPE OF SALT</th>
<th>ACID AND BASE USED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium borate</td>
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<tr>
<td>Copper (II) sulfate</td>
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<tr>
<td>Sodium carbonate</td>
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<tr>
<td>Sodium chloride</td>
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<tr>
<td>Potassium nitrate</td>
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<tr>
<td>Iron (III) chloride</td>
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<tr>
<td>Lead acetate-nitrate</td>
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<tr>
<td>Aluminum sulfate</td>
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<tr>
<td>Ammonia chloride</td>
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<tr>
<td>Sodium phosphate</td>
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</tbody>
</table>

ACIDS

- sulfuric $H_2SO_4$
- hydrochloric $HCl$
- nitric $HNO_3$
- carbonic $H_2CO_3$
- boric $H_3BO_3$
- phosphoric $H_3PO_4$
- acetic $HCH_3O_2$
- tartaric $H_2C_4H_4O_6$
- hydrofluoric $HF$
- sulfurous $H_2SO_3$

BASES

- sodium hydroxide $NaOH$
- calcium hydroxide $Ca(OH)_2$
- potassium hydroxide $KOH$
- magnesium hydroxide $Mg(OH)_2$
- aluminum hydroxide $Al(OH)_3$
- ammonia-water $NH_4OH$
- iron(III) hydroxide $Fe(OH)_3$
- copper (II) hydroxide $Cu(OH)_2$
- lithium hydroxide $LiOH$
- lead hydroxide $Pb(OH)_2$
- barium hydroxide $Ba(OH)_2$
- zinc hydroxide $Zn(OH)_2$