

Qualitative Analysis Tests

1. Solubility test- use a pea sized amount of substance to be tested into a test tube with 5 ml of water or selected solute.
 2. Iodine Test- add a drop or two of iodine to solution. Wash down drain with water.
Blue is a positive test for starch.
 3. Vinegar Test- Place a small amount of solid substance into a clean test tube add 1ml of vinegar and note any gas bubbles.
 4. Phenolphthalein- pink indicates basic solution.
 5. Sodium Hydroxide test- add a few drops to solution and look for white ppt. If solution becomes cloudy this is an indication that a ppt. is forming. Clear solutions indicate no ppt. formed.
 6. Benedict's solution- add a few drops to sample solution.
 7. Hot Water Bath- Add solid to about 1ml quantity in test tube and then add 5 ml of water. Heat the test tube gently. Carefully watch to see how quickly the solid dissolves.
- Note – Boric acid should dissolve in rubbing 10 ml alcohol if you add only a pea sized amount. Look at crystalline solids under a hand lens. Note the different shapes. Can you identify the crystals using this method?

Write Ionic and Net Ionic equations for the 6 reactions with a + by the product. Label the reaction type and check all formulas used in the equations. Be sure to include all charges on ions, and s, aq, l symbols to indicate state of the substance in the equation. Use your solubility rules to determine which of the products are precipitates in double displacement reactions.