Conversions and Black Snakes!

Materials

1. Ethanol
2. Baking soda $NaHCO_3$
3. Sugar C_2H_5OH
4. Tin Foil

Observations: Brown sugar is also called raw **sugar**. ... The main **difference between** raw (**brown**) **sugar and white sugar** is that **brown** hasn't completely been **refined**. Raw **sugar** is 96% pure, the rest is molasses (still containing minerals), while **white sugar** is pure calories (4 calories per gram). **Powdered** or **confectioners' sugar** is **granulated sugar** that has been finely ground and mixed with a small amount of cornstarch to prevent caking. Powdered sugar is very fine.

Hypothesis: Which sugar will form the most "black snakes"?

Procedure

1. Convert the following ingredients from pounds to Grams:

   Show your conversions below!

   a. 0.035274 pounds of Sugar C_2H_5OH = _____ Grams

   0.00220462 pounds = 1 gram

   b. 0.0110231 pounds of Baking Soda $NaHCO_3$ = _____Grams

   0.00220462 pounds = 1 gram

   c. .00264 gallons of ethanol = _____ milliliters

   3785.41 milliliters = 1 gallon

2. Measure out each of the ingredients using a scale. Be extremely precise in order to get good results!
3. Mix the baking soda, sugar, and ethanol together in a small beaker.
4. Lay out some tin foil on a table.
5. Pour the sugar, baking soda, and ethanol mixture onto the aluminum foil.
6. Light a match and place it on the mixture.
7. Observe the sugar mixture to see what is formed.
8. Repeat the experiment but use powdered sugar and observe the results.
9. Repeat the experiment again with brown sugar and observe the results.

Conclusion:

1. Was your hypothesis correct or incorrect?