



## Creating “King Kong's Hand” Concept

*Vinegar and baking soda react to form CO<sup>2</sup>.*

### Materials

- \* Latex Glove
- \* Vinegar
- \* Baking Soda

### Procedure

- \* Take one latex glove and open it up wide enough to pour baking soda into it. Fill the thumb about half way up and twist a couple of times to prevent the baking soda from falling into the remainder of the glove.
- \* Pour 50 mL of vinegar into the beaker.
- \* Hold the latex glove filled with baking soda and fill two of the remaining fingers with vinegar about ¾-full and make sure it is securely fastened by tying off the end of the glove with a slipknot.

### Explanation

The vinegar and baking soda react to form carbon dioxide gas, CO<sub>2</sub>. This gas is then trapped inside of the glove. The gas molecules hit the sides of the glove to cause pressure to blow it up. The more gas that is formed results in more molecules and causes an ever increasing pressure. As a result of this the more the reaction, the larger the glove.

Acetic acid + sodium bicarbonate → carbon dioxide + water + sodium bicarbonate

$\text{HC}_2\text{H}_3\text{O}_2 + \text{NaHCO}_3 \rightarrow \text{CO}_2 + \text{H}_2\text{O} + \text{NaC}_2\text{H}_3\text{O}_2$

**Safety: Be careful not to let the glove expand to far as it may explode. Spills may occur, but are not dangerous. Wear eye goggles.**

