



Baking Soda Volcano

Purpose : To show the reaction of baking soda,

dishwashing detergent and vinegar which will smoke and sputter and shoot flames like a volcano should.

Materials :

- 15 ml of baking soda,
- 15 ml of liquid dishwashing detergent
- 80 ml of water
- Some red (and possibly some yellow) food coloring
- 60ml or so of vinegar
- Erlenmeyer flask

Procedure :

Place the Erlenmeyer flask on a tray. Put baking soda and dishwashing detergent to the flask. Add 180 mL of water and a few drops of optional food coloring. Gently stir the mixture to mix the contents of the flask. To display and observe the fizzing and foaming, quickly pour the vinegar into the glass. The mixture will foam up and over the top of the glass, covering the tray with a froth of tiny bubbles.

USAGE IN DAILY LIFE :

The reaction of sodium bicarbonate to form carbon dioxide gas is the basis of its use as a leavening agent in baking. The foam is produced when bubbles of carbon dioxide from the reaction of sodium bicarbonate are trapped in the batter. As the cake bakes, the batter dries, and the trapped bubbles of carbon dioxide form the holes in the cake and the cake rises.