

ELEPHANT TOOTHPASTE



SUPPLIES

- 1/2 Cup of Hydrogen Peroxide
- A Packet of Dry Yeast (one packet is approximately 1/4 oz)
- 3 Tablespoons Warm Water
- Food Coloring
- A Cylinder (at least 500 ml)
- A Tablespoon of Dish Soap
- A Tray
- A Funnel
- Safety Goggles

INSTRUCTIONS

- 1 With safety goggles on, place your cylinder in your tray. Have an adult pour the hydrogen peroxide into the cylinder.
- 2 Add two pumps (or about one tablespoon) of dish soap into the cylinder.
- 3 Add several drops of ONE color of food coloring. If you want to create those classic toothpaste looking stripes, add the same color to various sides of the cylinder.
- 4 Mix the yeast with the warm water for at least 30 seconds.
- 5 Pour the yeast into the cylinder, step back and watch the foamy magic happen! **DON'T TOUCH THE FOAM AS IT'S AN EXOTHERMIC REACTION AND IS HOT!** After several minutes, it does cool down.

What's the Science?

Hydrogen peroxide (H_2O_2) is composed of water and oxygen. The yeast is a catalyst that takes the oxygen away from the hydrogen peroxide and in turn forms water and oxygen.

The oxygen then gets trapped by dish soap and forms lots of bubbles which is the foam you see that looks like elephant toothpaste!

The resulting experiment produces oxygen, gas, water and iodine so you may notice a brown or yellow tint to your foam. This reaction is exothermic which means it produces heat, so do not touch the foam right away.