

Elephant Toothpaste



Materials:

- A clean 16-ounce (473 ml) plastic soda bottle or a water bottle.
- 20-volume hydrogen peroxide liquid (20-volume is a 6% solution, which is stronger than what you find in most pharmacies. It is typically used for lightening hair and is found at many beauty supply stores. You can use the 3% hydrogen peroxide found in pharmacies, but the reaction will be a bit smaller)
- 1 tablespoon (15 ml—one packet) of dry yeast
- 3+ tablespoons (15 ml) of warm water
- Liquid dish washing soap
- Food coloring
- Small cup
- Funnel
- Safety goggles

Adult help

NOTE: The foam could overflow from the bottle, so be sure to do this experiment on a washable surface, or place the bottle on a tray.

CAUTION: The unreacted hydrogen peroxide can irritate skin and eyes. Read the safety information on the hydrogen peroxide bottle and be sure to wear safety goggles.

What to do:

1. Use a funnel to carefully pour 1/2 cup (118 ml) of the hydrogen peroxide liquid into the bottle
2. Add about 10 drops of your favorite food coloring into the bottle.

3. Add about 1 tablespoon (15 ml) of liquid dish soap into the bottle and swish the bottle around a bit to mix it.
4. In a separate small cup, combine the warm water and the yeast together, and mix for about 30 seconds. It should be about the consistency of melted ice cream—add a bit more warm water if needed.
5. Now the adventure starts! Use the funnel to pour the yeast-water mixture into the bottle and watch the foaminess begin!

Can I touch the foam?

The reaction typically breaks down the hydrogen peroxide so you are left with mostly just soapy water and yeast. There can, however be un-reacted peroxide which could irritate skin and eyes. For that reason, it is recommended you do not touch the foam.

(If you use the 3% hydrogen peroxide found in most pharmacies, then the foam can be touched safely.)