FOAM!

SUPERNOVA
DALHOUSIE UNIVERSITY | HALIFAX, NOVA SCOTIA

FUN, FOAMY CHEMISTRY AT HOME!

MATERIALS

9

500 mL plastic bottle
1 tbsp of dish soap
1 Balloon
1/2 cup 3% hydrogen peroxide
A few drops of food colouring
1 Packet active dry yeast
1 Pair safety glasses
1 Pair gloves
1 Garbage bag

15-45 MINS

PROCEDURE

Step 1

Begin by emptying the packet of yeast into the bottle. Add some warm water. Put a balloon on the top of the bottle. As the yeast blooms it will release carbon dioxide! The balloon will swell as more gas fills it!

Step 2

After the balloon has swelled, add the dish soap to the bottle and swirl.

Step 3

Lay the garbage bag across the surface you are using. The next steps may make a mess!

Step 4

Drip food colouring into the bottle, directly into the liquid mixture and/or on the sides of the bottle.

Step 5

Add the hydrogen peroxide to the mixture. The hydrogen peroxide and yeast will react! You should see lots of foaming! Be careful, the narrow neck of the bottle may cause it to shoot up suddenly!

YOU HAVE JUST CREATED AN EXOTHERMIC REACTION!

PURPOSE & SCIENCE OUTCOMES

- An exothermic reaction occurs when heat or energy is released during the reaction.
- Hydrogen peroxide breaks down into oxygen slowly over time. Yeast acts as a catalyst, speeding up the reaction.
- Can you think of any other exothermic reactions?
- Be sure to check out our other chemistry experiments such as Cabbage Patch pH!

ANY QUESTIONS? REACH OUT @SUPERNOVAATDAL