

Exploding Zip-Lock Bags



Materials:

- 1 sandwich size zip-lock bag
- Baking soda
- Warm Water
- Vinegar
- Measuring cup
- 1 tissue paper

Instructions:

1. Perform this experiment outside, a kitchen sink or the bathtub.
2. Put $\frac{1}{4}$ a cup of warm water inside the bag.
3. Add $\frac{1}{2}$ a cup of vinegar inside the bag.
4. Open up the tissue paper, place 3 teaspoons of baking soda.
5. Wrap the baking soda up in the tissue paper, folding the tissue paper around it.
6. Partially zip the bag closed but leave enough space to fit the tissue and baking soda packet through the open space.
7. Drop the packet into the bag and quickly seal it shut.
8. Put in the bag on the grass, in the sink or bathtub and step back.
9. The bag will expand until finally... Pop!



The Science

In this experiment, you are creating a chemical reaction! The vinegar and baking soda combine and release gas. That gas grows and fills up the bag, pushing on the sides until finally... Pop! It explodes the bag! After the first try, test it adding more vinegar makes it expand quicker, or more baking soda. This experiment works well with sealed spaces. In the Weather Lab we explode a paint can. Can you think of other containers to try?

Did you complete this experiment?

You could become a certified Weather Lab Assistant.
Send us a photo or video of you and the completed experiment at
kaaltv.com/weatherlab.

The Weather Lab Assistant of the week is announced on Wednesdays on
ABC 6 News Good Morning!

