

Fluffy Slime

Did you know every time you make slime you are observing a chemical reaction? Slime is formed when a chemical reaction occurs between polyvinyl acetate, or PVA, and borate ions. Swipe left and discover more while making fluffy slime!



Materials:

- Bowl
- White Glue
- Shaving Cream
- Measuring Spoons
- Spoon
- Baking Soda
- Liquid Starch
- Food Coloring (Optional)

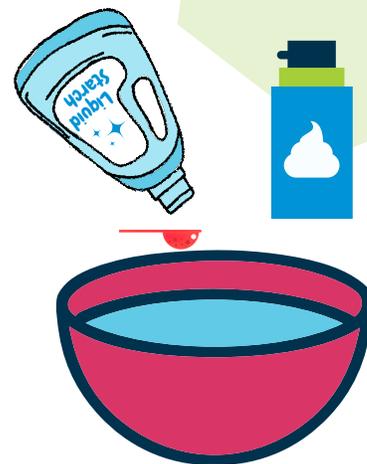
Procedure:

1. Pour 2 tablespoons of glue into the bowl.
2. Add $\frac{1}{4}$ teaspoon of baking soda to the glue in the bowl. If you are using food coloring, add 2 – 3 drops to the glue and baking soda now. Stir the mixture until it is fully combined.
3. Add a dollop of shaving cream and stir everything together until combined.
4. Add 2 teaspoons of liquid starch, then mix everything together. What's happening? Continue mixing until it starts to pull away from the sides of the bowl.

1, 2



3, 4



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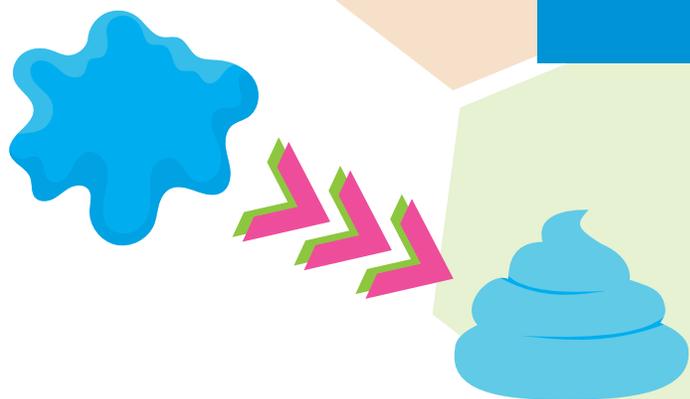
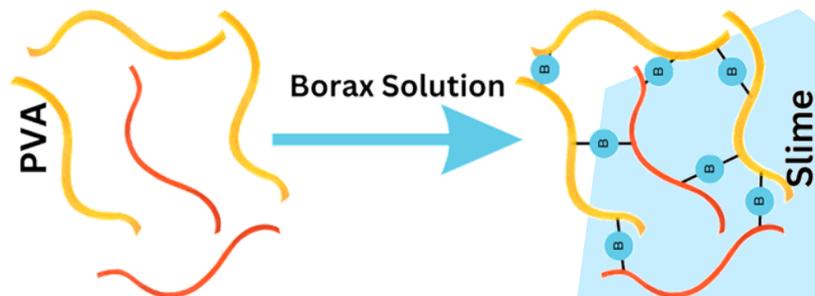
WHAT'S HAPPENING?

Slime is formed from a chemical reaction between **polyvinyl acetate**, or **PVA**, which is the main ingredient found in washable school glue and **borate ions**, which are present in the liquid starch solution.

In this reaction, the borate ions link together the long strands of molecules in the PVA creating a **Non-Newtonian fluid**. *What happens to your slime as you mix it quickly or hold it loosely in your hands?*

As the shaving cream is dispensed, can you hear something? That hiss that you hear is a gas, such as butane, propelling the creamy shaving cream from the can. As the gas escapes from the can, it creates little bubbles making the cream nice and fluffy!

When we add it to our slime, that fluffy shaving cream changes the texture of the slime.



DID YOU KNOW?

A **chemist** is someone who studies everything about the different chemicals that exist in our world! If you liked exploring this activity, maybe chemistry is for you!