

Eyedrop Slime

Materials needed:

- 1/2 cup (125mL) of glue (try with white or clear glue for different results – clear glue tends to result in a more flexible slime!)
- ¾ tsp (3.75mL) baking soda
- 40-50 drops (**total**) of eye drops/contact solution*
- Food colouring

Directions:

1. Add your favourite colouring to the glue and mix.
2. Add baking soda to glue.
3. Mix well.
4. Add eye drops 10 at a time, mixing with each addition.

*Any solution that contains the active ingredient boric acid will work.

Why does it work?

Many of these recipes rely on the element **boron** to make them work. Glue is mostly made up of a chemical called polyvinyl alcohol, or PVA. This PVA is a **polymer**, basically a long chain of molecules (think of spaghetti or a necklace). When you add boron (an active ingredient in Borax, boric acid, contact solution and some liquid starches) to the PVA, some spots on the long chains start to stick to each other, instead of sliding over each other. We call this **cross-linking**. Soon the liquid glue becomes a rubbery solid, which we call an **elastomer**. This process is called **polymerization**, and we use it every day to make plastics and other products.

Fluffy Slime

Materials needed:

- Shaving cream
- 1/2 Cup (125 mL) of Washable NonToxic Clear Glue (or white glue, however clear glue works best here!)
- 1 tablespoon or 30 mL (or more) eye drops/contact solution*
- Food colouring

Directions:

1. Measure **3-4 cups** of shaving cream into a bowl.
2. Add a 1/2 cup of glue to the shaving cream and mix thoroughly.
3. Add your favourite food colouring & mix
4. Add 1 tablespoon of the saline solution to the mixture and start whipping until combined. You may need to add more, so the more you add, the less sticky the slime becomes)

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Oobleck (Non-Newtonian Fluid)

Materials needed:

- 1 box of cornstarch (Maizena)
- 1 cup (250mL) of water
- Food colouring

Directions:

1. Place cornstarch in a bowl.
2. Slowly add water, stirring frequently. You may not use all of the water.
3. Add your favourite colouring & continue mixing
4. When it becomes hard to stir the Oobleck, check to see if you have achieved Non-Newtonian Fluid status. (Can you make a ball of Oobleck while squeezing that quickly falls apart into drizzling liquid when you stop squeezing?)

This slime is edible, but not really tasty.