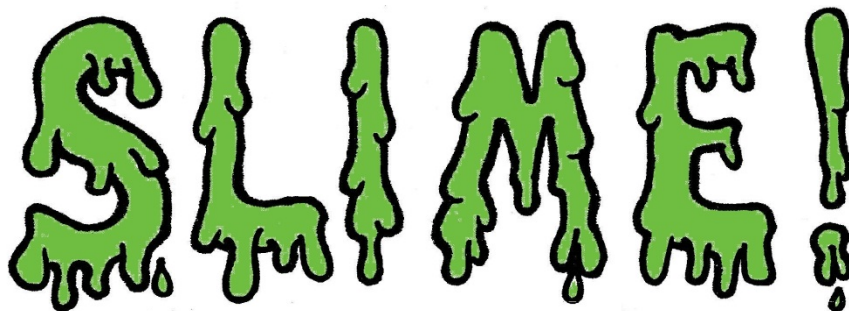


# Making



1. Dissolve 100g **borax** in 2L of warm water, stir until dissolved.
2. In a separate bucket or large bowl, add 30g (about 10 slightly heaped teaspoons) **guar gum** to 2.5L warm tap water. Mix in really well, then squeeze the lumps to break them up if you can. Push the mixture through a sieve into a second bucket to remove the remaining lumps.
3. Add 100mL **glycerol** (also known as glycerine) and a dollop of **food colouring** to the gum mix. Stir thoroughly to combine.
4. Slowly add the borax solution to the gum mix – just a small splash at a time (about 10mL) and stir vigorously after each addition. You can feel the guar gum **polymerising** (forming long molecular chains) - make sure you work in the borax solution well with lots of stirring. When the mixture stops sticking to the container and your skin, it's slime!
5. Now play with your slime! Can you dribble it slowly through your hands? What happens when you throw or stretch it? Can you cut it with scissors? Can you pick it all up at once?



This slime recipe uses borax (from supermarket laundry or cleaning aisles) to **polymerise** guar gum (from some health food or gourmet food shops). That means molecules in the gum join together to form long strings or chains. Glycerol (from supermarket medicine aisles) helps with the texture.

Slime flows differently to normal liquids, so we call it a **non-Newtonian fluid** or a **stir-thickening fluid**.

Some other non-Newtonian fluids are oobleck (a stir-thickening fluid made from cornflour and water)... and a stir-*thinning* fluid you might know well: tomato sauce! There are many 'slime' recipes in books and online.

**Caution: borax is dangerous if eaten.** Follow the safety precautions on the container, wash your hands after touching borax solution or slime and keep them out of reach of very young children. Don't use slime utensils with food afterwards. Keep slime in a ziplock bag, discard when it turns mouldy.