How to Make Slime

There are many recipes around for ways of making slime, lots based on PVA glue. This recipe is however a bit different, and is very similar to the commercially available slime toys. It has a key advantage that the materials are cheap and so large quantities are possible. You could even fill a bath full if you wanted to!

Whilst the materials on this page that are not known to have any significant health risks associated with them, they cannot all be classed as completely hazard free.

The largest single issue is the slipperiness of the mix- it can be very easy to slip over on. It is therefore essential to consider this when planning any activities involving slime, including clean up and washing off as the most significant effects will be found on a smooth surface such as a bath!

The materials are relatively fine powders, and as such create nuisance dust. It is therefore worth wearing a dust mask if handling large quantities. Likewise if this dust gets into eyes it can cause irritation.

Guar gum is not hazardous when eaten, however it can be used as a laxative, so it would probably be unwise to consume large quantities.
Borax (Sodium Tetraborate) is not safe for consumption, and should therefore be handled and used carefully so as to avoid ingestion, although in the quantities actually present in slime it should not cause any concern.

In addition to the specific information above, general safe chemical handling practice will further reduce the risk of any issues, in particular:
- Store materials in sealed, well marked, containers in an area out of reach of children and pets
- Wash thoroughly before and after handling these materials
- Dispose of excess/used materials/empty packaging responsibly
- Clean up any spills quickly- Avoid using water to stop the area becoming slippery
- Do not use utensils/containers/cleaning cloths that will be later used for food
- Supervise children whilst making or using the slime

In these instructions the quantities I give will make 1 litre of stringy slime. Quantities can therefore be easily adjusted to suit smaller or larger batches to suit your needs.

There are many other recipes for making goo, both on Instructables and other places on the web as well as commercial products, so why use this one?

You enjoy making things and you will probably learn something new whilst making this
You have full control of the properties of the goo- from runny to thick, clear to opaque and colourless to vivid colours
You can happily make large quantities of goo- even filling a paddling pool becomes practical (think how many tubs of toy shop slime you’d need to do this, or how much PVA glue)
The materials are easy to store- you can easily keep some on hand for rainy day play, or next Halloween
The gunk is a bit sticky- it therefore has a much better feel, and visual appeal than some commercial products (like Gellibaff), that simply run off.
The materials are biodegradable, and hence easy to dispose of
Most importantly- it’s more fun than buying it!

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Before you start, It would be a good idea to read the general notes on the main gunge page.

Gather the materials together. You will need;
Guar Gum- This is available from health food shops.
Borax (sodium tetraborate)- Can be found in supermarkets as a water softener with laundry items. Check it doesn’t have anything else added to it.
Glycerine- available from chemists or the baking/ cake decorating aisle of the supermarket
Colouring- food colour, poster or powder paint
Suitable container to mix in
Scales
Wooden spoon, whisk or similar
Measure out the following quantities of materials. I use plastic cups to do this, but a piece of folded paper will work as well. Quantities do not have to be precise, but it may help you make a batch the same in the future if you can be fairly accurate. The water can go into the mixing container straight away.

Guar Gum 10 grams (1%)
Borax 10 grams (1%)
Glycerine 10 grams (1%)
HOT water 1 litre

Add the glycerine to the water - you may need to swirl the container you used to measure the glycerine out with water.
Add your chosen colouring, dependent on what effect you want. Food colouring will give a transparent slime, the paints will make the slime opaque. I’d recommend around 20g of poster or powder paint for a reasonable colour (2%) although I have used up to 5% for some uses. Stir thoroughly.

Add the guar gum to the water and stir thoroughly. Once it has fully dispersed it is sensible to leave the mix to stand for at least 1/2 hour. Leaving to stand will make sure that the guar gum has fully gelled, and will avoid the finished slime being lumpy. I have found a hand food mixer works effectively in giving a well mixed concoction.
Whilst waiting for the mix to thicken, add 10 grams of borax to approx 100ml of hot water and stir thoroughly. If it doesn't fully dissolve, add some extra water.

When you the guar mix has been standing for long enough, start mixing in the borax. This should be added in small quantities (approx 5 ml at a time) using a small spoon or similar. Stir the borax into the guar mix.

The slime will start forming- once it has started to noticeably thicken and string, it is worth then continuing the mixing by hand. Keep adding and mixing borax until you are happy with your slime.

Note- it is not possible to dry mix the ingredients and just add to the water as the Guar won't hydrate properly if you do.
Play away to your hearts content! This slime will keep for a while, but should ideally be stored in a sealed container.

Changes to the strength of the guar mix and to the amount of borax will alter the properties of the slime from liquid and stringy to rubbery. Combine this with changes to the colouring and you have a wide range of slimes for different uses from kids to play with to drool for your alien movie.