



CHEMICAL CATASTROPHES!

OSHC ACTIVITY



Included here are instructions for making two kinds of slime and a very tasty edible sherbet treat. Each of these can be made on any scale, but be prepared for mess.

Safety Information:

Sherbet:

- Sherbet is mostly sugar—be aware of any diabetics in the room.
- Citric acid, tartaric acid and sodium bicarb are all common food additives and safe to eat, but they can all be painful if they get into the eye or are inhaled.

Slime:

- Keep dry cornflour away from naked flame—if the bag is dropped and the powder becomes airborne it can be highly flammable.

Snot:

- Borax powder is irritating to the skin and eyes. It is recommended that staff prepare the borax solution.
- Remind the younger children that glue, borax and the resulting slime are not for eating.

Preparation:

All of the materials are readily available at your local supermarket. To save money on the citric acid, you may wish to try your local 'health foods' store—they often have bags of citric acid for a fraction of the price in the supermarkets.

The borax for the 'Snot' can be found in the cleaning products aisle.

Be prepared for mess—especially with the cornflour slime. It is strongly recommended that the slime is mixed outdoors.

If you choose to include food colourings in either of the slimes, go easy with them or the colours will end up transferred to the children's hands, faces, hair, clothes...

Have fun!



CHEMICAL CATASTROPHES OSHC ACTIVITY



SHERBET

YOU WILL NEED:

Citric Acid Crystals, Tartaric Acid, Bicarbonate of Soda, Pure Icing Sugar, Measuring Spoons, Mortar and Pestle, Ziplock Sandwich Bags

THE RECIPE:

- 1/2 teaspoon citric acid
- 1/2 teaspoon tartaric acid
- 1/2 teaspoon bicarbonate of soda
- 5 teaspoons of pure icing sugar



THE METHOD:

- Add the first three ingredients to the mortar and pestle and grind together into a fine, well mixed powder.
- Pour this mix into a sandwich bag and add the icing sugar. Seal the bag well.
- Turn the bag over and over until all of the powders are well mixed.

TIPS:

All of your materials and utensils **must be absolutely dry**.

To flavour the sherbet, add two teaspoons of your favourite jelly crystals (Aeroplane™ Jelly Creaming Soda works very well).

Another way to flavour your sherbet is to eat it off a Chupa-Chup™ or a stick of liquorice.

Of course, you could just be brave and eat it with a spoon.



CHEMICAL CATASTROPHES OSHC ACTIVITY



SLIME

YOU WILL NEED:

Corn Flour (the real thing, not the wheat version), Water, Food Colouring (optional), Measuring Cup, Large Ziplock Sandwich Bag, Large Bowl

THE RECIPE:

- 2 cups of cornflour
- 1 cup of water
- Drops of food colouring if you wish



THE METHOD:

- Add two cups of cornflour and 1 cup of water to a large ziplock bag.
- Squeeze out half of the air and then seal the bag well.
- Gently turn the bag over and over until your slime is well mixed. This may seem like a roundabout way of doing things but it mixes much easier and faster than trying to do it with a spoon.

WHAT IS IT?

Cornflour slime is a **Non-Newtonian Fluid**, meaning that it responds to forces in some weird ways.

The slime will flow, drip, dribble and generally make a mess as long as it is allowed to move slowly. Gently sink your hand into the bowl and see for yourself (prepare for grossness...).

If you push hard on the slime it will toughen up and resist as the cornflour particles are quickly pushed against each other and grind together. Try punching the slime—it (probably...) won't splatter everywhere. Honest.



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YOU WILL NEED:

Borax, White Glue (PVA wood glue is ideal), Food Colouring (optional),
Measuring Spoons, Measuring Cups, Small Ziplock Sandwich Bags

THE RECIPE:

- 1/4 cup of borax mixture (see below)
- 1/4 cup of glue mixture (see below)
- Drops of green food colouring if you wish



THE METHOD:

- Make a batch of borax mixture first: dissolve 1 tablespoon of borax powder in 1 cup of water. **Borax powder is irritating to the skin—take care!**
- Make a batch of glue mixture next: well mix equal parts glue and water.
- Add 1/4 cup of each mixture to the sandwich bag, along with 1 drop of green food colouring. Squeeze most of the air out of the bag and seal it carefully.
- Gently knead the mixture inside the bag until your snot is well mixed. Your snot is now ready.
- Remember to wash your hands after playing with it. **Don't Eat It!!**

WHAT IS IT?

The PVA glue is a Polymer—long chain molecules made of repeating parts. The borax forms links between chains, essentially forming a molecular net fine enough to capture water. The resulting 'snot' gel is a **Non-Newtonian Fluid**, meaning that it responds to forces in some weird ways.

Under low stress the 'snot' will flow and stretch, but under high stress (pulling on it sharply) it will break. If you throw a small piece onto a hard surface you can get it to bounce.