

Here is the website for this recipe:

<http://www.wcsscience.com/silly/putty.html>

Do-It-Yourself "Goofy Putty"

(Recipe by Steven Spangler)

Ingredients:

- Elmer's White Glue (Do NOT substitute)
- 1 tablespoon of Borax (or substitute liquid starch)
- Food colouring
- 1 cup of water
- Empty plastic soda bottle, with cap
- Zipper-lock bag (quart size)

Make the borax water:

Borax is a type of powdered soap that is available in many grocery stores. Add 1 tablespoon of Borax powder to 1 cup of water. Stir until most of the powder dissolves. Store the borax water in a jar or bottle, and label it "Borax & Water Mixture". You can keep it to make more batches ... one cup of borax water will make many batches of putty.

Prepare the glue:

Measure 1 tablespoon of Elmer's Glue into a zipper-lock bag. Add 1 teaspoon of plain water to the bag and mix. The additional water makes the glue flow better. Add a drop of food colouring to make it look nicer.

Make the putty:

Add just 1 tablespoon of borax water to the bag of watered-down glue. Seal the bag, and squeeze it between your fingers for 2 minutes, in order to thoroughly mix the liquids. The liquids will start to form a putty-like substance. When this has happened, remove the putty from the bag and continue to squeeze it.

We actually tried making some of this stuff, which we call Goop. [Have a look](#)

How It Works:

The mixture of Elmer's Glue with borax and water produces a putty-like material called a **polymer**. A polymer is a long chain of molecules. (Picture in your mind strands of cooked spaghetti). If the polymer chains slide past each other easily, then the substance acts like a liquid, because the molecules flow. If the molecules hook together at a few places along the strand, then the substance behaves like a rubbery solid, called an **elastomer**. Borax is the chemical that is responsible for hooking the glue's molecules together to form the putty-like material.

Safety Precautions:

Although these substances are not considered hazardous, you should treat all chemicals with care, and wash your hands after handling them. Do not taste or eat any of the materials. Do not pour any of these materials down the sink. Do not allow any putty to remain on clothing, upholstery, wood surfaces, or carpet, since they may stain or damage them.