

Lab 8- Biodegradable Plastic

This are lists of materials and tools needed to make the biodegradable plastic:

Materials

- Corn Starch
- Water
- Vinegar
- Cooking Oil
- Food dye
- Glycerin

Bio-plastic ingredients for starters: You can adjust amounts as necessary to achieve desired results.

- ~10 g cornstarch
- ~2 mL of cooking oil
- ~10 ml vinegar
- ~5 ml glycerin
- ~20 ml water
- 1 drop of dye

“~” symbol means about that much,
this doesn't need to be measured exactly

Step 2: Tools

- Spoon/Something To Measure With
- Microwavable Container
- Microwave

Step 3: Mixing

Mix the ingredients together to form a milky looking liquid. Once you have done this it is ready to be microwaved.

Step 4: Microwaving

Put the mixture in the microwave and set the microwave on high for 25-30 seconds. The mixture should start to bubble and should become slightly transparent. Keep an eye on the mixture to make sure nothing goes wrong.

Step 5: Molding the Plastic

Think of something the plastic could be used for and design a way to mold the bio plastic into that shape.

Step 6: Ideas

You can use it to make plant pots so you start the plants indoors and when they've grow you can put them in the ground. Make an eating utensil and see how well it performs (don't actually eat with it though).

Step 7: Design a test

Use your new bio plastic molded invention and see how well it performs. Think of tests you can perform like how long does it hold up, how long does it take to break down or decompose, what chemicals speed up the decomposition process.

Step 8: The Report

Write up your report on what you made, how you made it, data you collected, and reflect on how well the idea worked and what you could try differently if you did it again.