

## Making Bioplastic

### MATERIALS:

- |                                |                       |
|--------------------------------|-----------------------|
| 1 tablespoon (14 g) cornstarch | 2 drops food coloring |
| 1 tablespoon (15 mL) water     | 1 measuring spoon     |
| 2 drops corn oil               | Ziploc bag            |

### PROCEDURE: Part 1

1. Measure 14 g (1 tablespoon) of cornstarch into your plastic bag.
2. Add 15 ml (1 tablespoon) of water to the cornstarch.
3. Add 2 small drops of corn oil to the mixture in your bag.
4. Add 2 drops of food coloring to the mixture in your bag.
5. Seal the bag, and squish it gently to mix everything together.

Describe the mixture in your plastic bag: \_\_\_\_\_

\_\_\_\_\_

How does it feel when you slowly squish the bag? \_\_\_\_\_

\_\_\_\_\_

Does it feel the same when you squeeze the bag quicker/harder? \_\_\_\_\_

\_\_\_\_\_

Is your mixture a solid or a liquid? \_\_\_\_\_

### PROCEDURE: Part 2

6. Microwave your mixture on high power for 20 seconds. Be sure to leave the bag open a tiny bit so that steam can escape. Be careful, the plastic will be hot!
7. Let it cool for several minutes. While it is cooling answer the questions below.

What does your new substance look like? How is it different from the mixture you started with?

\_\_\_\_\_

\_\_\_\_\_

If your plastic is cool, knead it with your hands. What does it feel like? Describe its other properties.

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\_\_\_\_\_

What could you make with your bioplastic? What couldn't you make? Why?

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\_\_\_\_\_

What is used to make bioplastic? \_\_\_\_\_

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