



Purpose:

The purpose of this activity is to investigate the properties of a cornstarch and water mixture, and relate the observations to knowledge of pure substances and mixtures.

Equipment:

- 75 ml cornstarch
- 45 ml water
- 2 drops food colouring – not necessary, but makes product more “fun”
- 1 popsicle stick – used for mixing
- 1 cup – or other container, needed to contain components while mixing
- 1 zip-lock bag – to hold substance when finished

Procedure:

1. Put 75 ml of cornstarch into a cup.
2. Add 45 ml of water to the cornstarch.
3. Mix the two ingredients.
4. Add 2 (small) drops of food colouring to the mixture.
5. Continue to stir until it is difficult to do so. Note: You may need a little more cornstarch if the food colouring makes the mixture runny.
6. Take the “magic mud” out of the mug and manipulate it with your hands and fingers.
 - a. Try rolling it into a ball.
 - b. Try rolling it in a log.
 - c. Try making a shape.
 - d. Try letting it sit flat on your hand.
7. Put your “magic mud” in the zip-lock bag, you may take it home.

Questions:

Ponder the following questions:

1. Is “magic mud” a liquid or a solid?
2. What makes it more like one than the other?
3. Is “magic mud” a heterogeneous or homogeneous mixture? Why?