

# Turning Milk into Plastic



## Here's what you'll need

- Milk (1 cup)
- Stovetop and pan  
(or microwave and microwaveable container)
- Thermos or another insulated container



- White vinegar (4 teaspoons)
- Paper towels
- Heat-resistant cup or mug
- Food coloring, glitter, and markers (optional)
- Measuring cups and spoons

## Instructions

1

Add 4 teaspoons of white vinegar to the heat resistant cup or mug.

5

Fold up the sides of the paper towels and press down on the clumps to absorb extra liquid.

2

Have a grown up heat 1 cup of milk until steaming either on the stove or in the microwave.

6

Knead all of the curds together into a ball of "dough". This is your polymer!

3

Pour the hot milk into a thermos and from the thermos, into the mug with vinegar.  
- When the hot milk is combined with the vinegar, it should form white clumps.  
- Mix the mug of hot milk and vinegar slowly with a spoon for a few seconds.

7

Shape, color, or mold your plastic however you'd like! This step should be done within an hour of making the dough. Food coloring, glitter, or other decorations can be added.

4

Use a spoon to scoop out the clumps once the mixture has cooled a bit.  
- Tilt the spoon against the inside of the mug to let the excess liquid drain out.  
- Collect as many clumps as possible and drop them onto a stack of paper towels.

8

Let dry for at least 48 hours. Once dry, it should be hard, and can be painted or colored with markers.