CHEMICAL MANUFACTURING ACTIVITY

Polymers

Polymer Two

Questions

- How do polymers behave?
- Do they have the same properties?

Materials

- White glue
- Borax
- Water
- Spoon or popsicle stick to stir
- Small paper cups
- Food coloring
- Graduated cylinder
- Ruler
- Sealable plastic sandwich bags

Preparation

- Your teacher may have pre-prepared a borax solution. If not, prepare a borax solution: about 6 mL of borax to 235 mL of water.

✔ Procedure

1. Use the ruler to measure and mark 1 cm from the bottom of the small paper cup.
2. Add white glue to the 1 cm mark.
3. Add a few drops of food coloring and mix.
4. Measure 7 mL of water in the graduated cylinder and add to the glue. Mix well and pour into a plastic bag.
5. Measure 8 mL of the borax solution using the graduated cylinder and add it to the glue solution in the plastic bag. Mix well by kneading.
6. If it is too sticky, add borax solution one drop at a time. If it is to stringy, add glue one drop at a time.
7. Once the polymer is formed, you may remove it from the cup and knead it.
8. Pull your polymer apart, string it out, twist it, and roll it into a ball.
9. Write your observations about your polymer.

⁂ Conclusions

1. What happened when you combined the glue solution and the borax solution?

2. Explain how this is a polymer.