

Pour a Rainbow Demonstration Worksheet

Discussion Questions

1. Describe the appearance and behavior of the polyethylene oxide.

2. When polyethylene oxide is combined with water, the long polymer chains, which are already extensively bonded to each other, will form even more hydrogen bonds with surrounding water molecules. In this state it resembles intertwined spaghetti. How do you think this contributes to its gel-like appearance and self-siphoning behavior?

3. What is a polymer?

4. Universal indicator solution had been added to the water before the Polyox solution was poured into. Explain the color changes that occurred when hydrochloric acid was added to one beaker and sodium hydroxide was added to the other.