Polymers Procedure

Polymerization of Nylon-6,10

1. Add 10 mL of 5 % aqueous 1,6-hexanediamine to a 50 mL beaker. Next, add 10 drops of 20 % sodium hydroxide.

2. Carefully pour 10 mL of 5 % sebacoyl chloride in hexane down the side of the beaker. Two layers should form, and a polymer film should form at the surface interface. Carefully pull the film out using some copper wire with a hook on the end. Remember, we are trying to pull as long a strand as possible. Think of different ways you might do it (like winding it around your thermometer).

3. Measure the length of the polymer obtained.

Polymerization of Nylon 6,6

1. Add 10 mL of 5 % aqueous 1,6-hexanediamine to a 50 mL beaker. Next, add 10 drops of 20 % sodium hydroxide.

2. Carefully pour 10 mL of 5 % adipoyl chloride in hexane down the side of the beaker. Two layers should form, and a polymer film should form at the surface interface. Carefully pull the film out using some copper wire with a hook on the end. Remember, we are trying to pull as long a strand as possible. Think of different ways you might do it (like winding it around a beaker).

3. Measure the length of the polymer obtained.