

Lab Procedure for Standard/Control Sample Preparation

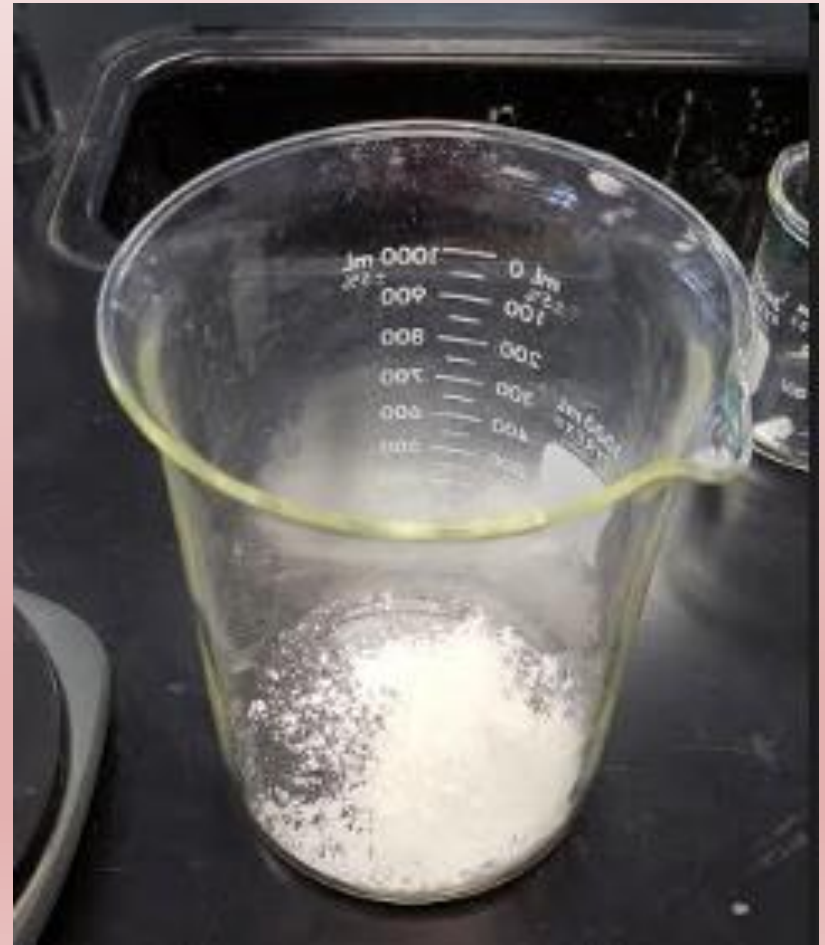
Preheat a hot plate to 400°C



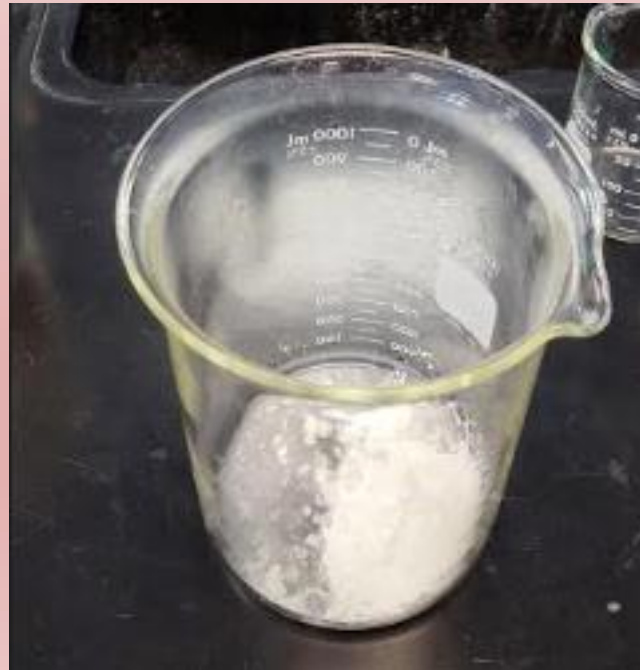
Label tops and bottoms of petri dishes with **group initials**, **sample name** and **reactant concentration**



In 1,000-ml beaker,
add 10 g of cornstarch



Using a 10-ml graduated cylinder, add 5 ml of vinegar to the same beaker



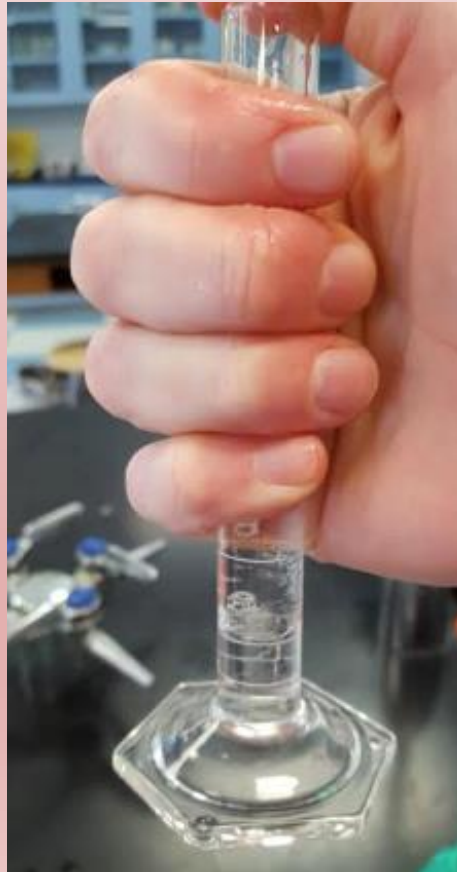
Using a 10-ml graduated cylinder, add 5 ml of glycerin to the same beaker





Using a 100-ml graduated cylinder, add 60 ml of water to the same beaker

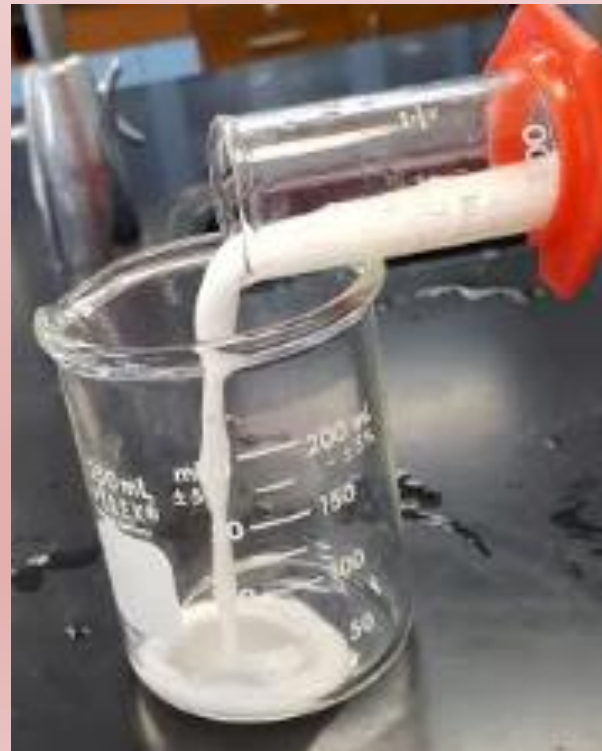
Use your measured water to get the glycerin residue from the graduated cylinder in the previous step



Using a silicone spatula, stir until all material is completely dissolved



Using a 100-ml graduated cylinder, measure out 60 ml of the mixture, and put into a clean 250-ml beaker



Add 0.6 grams of phosphorescent powder to the 60-ml mixture in the 250-ml beaker—and stir

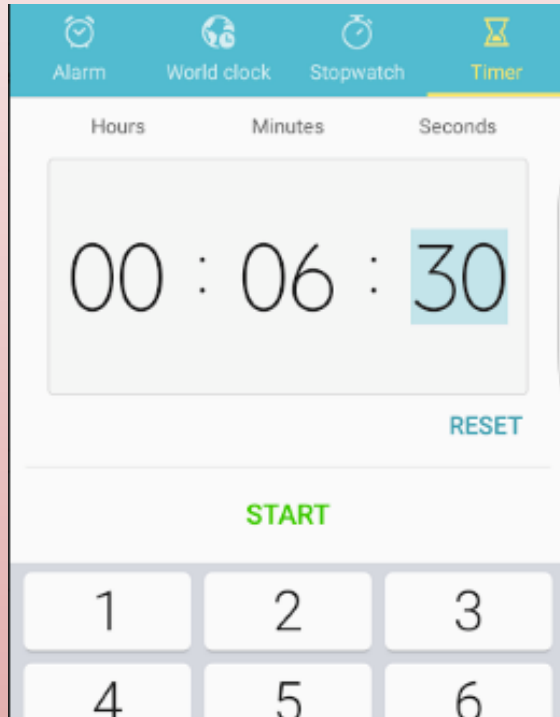


On the preheated
hot plate,
heat the mixture in
the 250-ml beaker

400 °C →



Continuously stir while heating the mixture for 6 mins and 30 secs



After 6 mins and 30 secs,
the mixture becomes clear
and/or a viscous solid



Using the silicone spatula,
transfer the heated mixture
to a prepared petri dish



Let the phosphorescence
bioplastic dry overnight