

# Procedure

## Isomerization of Dimethyl Maleate:

1. Add 0.5 mL of dichloromethane to a disposable test tube.
2. Then add 0.5 mL of dimethyl maleate.
3. Now add 0.5 mL of the bromine solution provided.
4. Place the test tube under the lamp provided in the lab. Your TA will point this lamp out to you.
5. Add 1-2 drops of cyclohexene to the test tube to remove the bromine.
6. Next, add 2-3 mL ethanol to tube. Heat it in a water bath until the solid dissolves (set the hotplate to about 150). Once the solid has dissolved, allow it to cool to room temperature slowly to allow the solid to precipitate out of solution.
7. Vacuum filter the solid using the Buchner funnel.
8. Wash the solid with 5 mL of cold ethanol.
9. Save your solid product for the following lab period when you will weigh the sample and observe the melting point.
10. Clean up all of your glassware and dispose of all chemicals properly.

**Note:** Be careful with the bromine. If there is a spill, be sure to clean it with the provided sodium thiosulfate around the spill. You will notice the brown color slowly disappear at which point the mess can be treated as halogenated organic waste or wiped up with paper towels and discarded in the trash.