

Ethyl Acetate-Sodium Hydroxide Kinetics

Version 16.1

Start up: The following steps should be taken before the experiment is started.

- 1) Find and read [literature](#) concerning ethyl acetate and sodium hydroxide kinetics.
- 2) Prepare solutions to be used in the experiment. (0.1M NaOH solution should be on the lab bench)
- 3) Turn on the constant temperature bath and select the desired temperature. Use the cooling or heating switch to cool or heat the water to the desired temperature.
- 4) Place a solution in the one liter batch reactor.
- 5) Turn on the stir plate and place a magnetic stir bar in the reactor.
- 6) Turn on the pH/conductivity meter and follow the enclosed [conductivity meter instructions](#).
- 7) Be sure that the conductivity meter has been properly calibrated. It has a 2 point calibration (1.413 mS/cm (0.01 M KCl) & 12.88 mS/cm (0.1 M KCl))
- 8) Add the needed reactant for the desired reaction to occur (ethyl acetate should be in flammable cabinet along the back wall). Use the temperature and conductivity probe to measure reaction conditions.

Shutdown: These steps are to be followed when ending the experiment.

- 1) Turn off the constant temperature bath.
- 2) Turn off the magnetic stirrer.
- 3) Empty the reactor and clean it.
- 4) Dispose of all wastes in appropriately labeled containers that have been provided (by the dye fading experiment).