

Lab 2 - ACID BASE TITRATION

Agri 201-Spring 2006

Purpose: to learn how to standardize acids and bases by titration.

Materials: refer to Preparing and Standardizing Acids and Bases handout.*

(1) 50 ml Burette	(1) unknown acid
(6) 250 ml flasks	(1) unknown base
(1) Finnpiquette (2-10ml) w/ tips	(1) phenolphthalein indicator
(1) 10 ml graduated cylinder	(1) 100 ml volumetric flask
(1) DI water bottle	(1) magnetic stirrer and bar
Oven dry potassium Acid Phthalate (It's in the desiccator.)	(1) Desiccator

Method: refer to Preparing and Standardizing Acids and Bases handout.

1. Make 100 ml of a .1 N potassium Acid Phthalate. (make only 100 ml)
2. Use this acid to standardize the unknown NaOH.
3. Determine the Normality of the unknown acid. Hint: Use the unknown NaOH to titrate this acid.

Questions:

1. What is the precision of your measurements? (Hint: do each titration at least 4 times.)
2. What is the accuracy of your measurement of acidity?
3. Discuss the working range, resolution and detection limit of this titration procedure ?

*This is for reference only. You don't have to make all the solutions on this handout. You only need to make one solution i.e. 0.1N potassium Acid Phthalate