6/5/2007



Titration of an Unknown Acid

Final Project Lab for Chemistry

Purpose

To use the concentration of a known base to determine the concentration of an unknown acid

Directions

Titrate to endpoint a *sodium hydroxide solution* with a *acetic acid solution* of an unknown concentration. Use phenolphthalein as an indicator. Start with 10mL of acid.

Results

- Using Acid "B" at .1012M concentration
- Filled up both burettes to 0mL

Titrated with 10.20mL of Acid "B" and 10.11mL Base

- $V_A*C_A=V_B*C_B$
- 10.20ml Acid * ?M Acid = 10.11mL base * .1012M Base
- 10.20mL * ?M Acid = 1.023132 mlM base
- (divide both side by 10.20ml)
- $.1003M = C_A$

Formula

 $NaOH_{(aq)} + CH_3COOH_{(aq)} -> Na_{(aq)} + H_2O_{(l)} + CH_3COO_{(aq)}$