

K_{sp} of Ca(IO₃)₂ Post Lab

Calculations

Perform the following calculations. You must show your work for these. Word's equation editor will let you do this. You can't write your work on a piece of paper, take a picture of the paper, and insert the picture.

1. Use the data you collected from Part 1 to calculate the K_{sp} of calcium iodate. You'll do this twice, once for each titration you performed.
2. Average the two K_{sp} values you just calculated.
3. Use the data you collected in Part 2 to calculate the concentration of iodate ions in the solutions you added calcium chloride salt to.

Results and Discussion

1. Write a brief summary of your experiment. As part of this, you have to describe:
 - a) What you were trying to accomplish
 - b) What your experimental approach was (or how you did it)
 - c) What your results were. Include the average K_{sp} you calculated as part of your summary.
2. Lookup the actual K_{sp} of calcium iodate. Include a reference for this.
3. How close is the K_{sp} you calculated to the one you looked up? What sorts of things (experimental or experimenter errors) might have caused the difference?
4. In your pre-lab, you made a hypothesis regarding the effect of adding calcium chloride salt on the concentration of iodate ions in a calcium iodate solution. Was your hypothesis true or not? Explain.