

Redox Titration of Oxalate

Procedure

Use the procedure for the standardization of potassium permanganate on the Harris website. This is hidden within Experiment 12 on the synthesis and analysis for ammonium decavanadate. Use this procedure for both the standardization of permanganate and analysis of oxalate. Do not boil the sulfuric acid.

Warning!!!! Any organic material in contact with the permanganate will react with it. Avoid acetone and soap. Wash materials used in this lab with acid instead. Normally, HCl is sufficient, but use HNO₃ if you need “big guns.”

If your solution turns brown in the middle of your titration, this trial is toast. There are usually 2 reasons this might happen. The most common is that your acid is not concentrated enough. Less common is the contact with organic material.