

Waste Profile
Laboratory Experiments for Advanced Placement Chemistry
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Lab #1:

- Collect the filtrate waste and adjust the pH to 6-8 and discharge the resulting solution down the sink with copious amounts of water. Note: Only 500 ml per day is permitted.
- Collect the silver chloride and place it in container #1.

Lab #2:

- Collect the waste and adjust the pH to 6-8 and discharge the resulting solution down the drain with copious amounts of water.
- **Provide adequate ventilation for this lab.**

Lab #3:

- Collect the filtrate from the crystal wash and adjust the pH to 6-8 and discharge the resulting solution down the drain with copious amounts of water.

Lab #4:

- Place the barium sulfate in container #1.
- Collect the filtrate and place it in container #2.

Lab #5:

Note: This lab is not recommended since it uses bromine water which is expensive to dispose of and toxic.

Part 1:

- Collect the lead metal and place it in container #1.
- Collect the other metal pieces, rinse them with tap water and discard them in the conventional trash.
- Place the remaining well contents in container #2.

Part 2:

- Collect the entire well contents and place them in container X .

Lab #6:

- Mix the products of reactions 2 and 3 and test the pH. If the pH is less than 6 or more than 8, adjust the pH and discharge the resulting solution down the drain with copious amounts of water.

Lab #7:

- Collect the residual liquid(s) and place it in container #3.

Lab #8:

- Do not use p-dichlorobenzene as it is a select carcinogen. Do not use cyclohexane due to its extreme flammability. The use of stearic acid or phenyl salicylate is recommended since all the components of the lab could be disposed of in the conventional trash. If you use naphthalene place the waste naphthalene in container #4.

Lab #9:

- No waste is generated in this lab.

Lab #10:

- Be sure to use a fume hood for step 3. adjust the pH of the resulting solutions to 6-8 and flush them down the drain with copious amounts of water.

Lab #11:

- Flush the resulting solutions down the drain with copious amounts of water.

Lab #12:

- Combine the contents of the wells and adjust the pH to 6-8 and discharge the resulting solution down the drain with copious amounts of water.

Lab #13:

- Combine the contents of the well plates together and adjust the pH to 6-8 and flush the resulting solution down the drain with copious amounts of water.

Lab #14:

- Combine the contents of all the test tubes in a beaker and adjust the pH to 6-8 and flush the resulting solution down the drain with copious amounts of water.

Lab #15:

- Flush the solutions down the drain with copious amounts of water. Small amounts of the solid acids can be placed in the conventional waste.

Lab #16:

- Flush the resulting solutions down the drain with copious amounts of water.

Lab #17:

- Part 1,2&3: Adjust the pH to 6-8 and flush the resulting solution down the drain with copious amount of water.

- Part 4: Test tube #1: Place the contents in container #3. Test tube #2: Place the contents in container #5. Test tube #3 in container #3. Test tube #4 in container #6.

Lab #18:

- Parts 1,2,3,4: Recycle the metals. Place the liquid contents of the wells in container #2.
- Part 5: Adjust the pH to 6-8 and flush the resulting solution down the drain with copious amounts of water.

Lab#19:

Note: Do not use mercury in this lab.

- Step 10: Skip the confirmation step using potassium ferrocyanide.
- Step 15: Place the contents of the test tubes in a beaker and adjust the pH to 8 and place the content in container #7.
- Combine the contents of all the other wells and adjust the pH to 6-8 and transfer to container #2.

Lab#20:

This lab generates wastes which would be expensive to dispose of properly. Therefore, avoid doing this lab.

Lab #21:

- Flush the resulting solutions down the drain with copious amounts of water.

Lab #22:

- Part 1: Flush the aqueous ester solutions down the drain with copious amounts of water.
- Part 2: Place the ethanol sodium carbonate mixture and the ethyl acetate in container #3.