

Lab #15 Separating Soluble and Insoluble Substances using Filtration

Question: Can we filter Copper Sulfate and Zinc Oxide after mixing each with water?

Hypothesis: If then, because.

Materials:

Water	Beaker	Stir Stick (tongue depressor)	
Graduated Cylinder	Test Tube	Burner	
(2) Filter Paper	Funnel	Hot hands	
Lab Scoop	Copper Sulfate	Heating Tile	
Zinc Oxide (1 scoop)	Crystals (1 scoop)	Goggles	

Please use your filter paper, funnel and a test tube to separate these solutions.

Procedures:

1. Complete the prediction part of your data table on the back.
2. **Goggles on.** Mix **two lab** scoops of copper sulfate with 25 ml of water in your beaker. **Heat over a burner until dissolved.**
3. Place filter paper in your funnel and place your funnel in the test tube. Read properties of matter book page 124 and 125 to see how to get the filter paper in the funnel.
4. Pour your copper sulfate solution into the funnel/filter.
5. Record the results on the data table provided.
6. Repeat steps 1-5 for zinc oxide.

Name _____ Per _____ Date _____

Data Table:

Mixture	Filtration Prediction	Result
Copper sulfate and water. (Blue)		
Zinc Oxide and water. (White Powder)		

Lab 13-15 Reflections: Answer the following questions in complete sentences.

1. In a solution, how can a solid solute be removed from a solvent if the solvent is water?
2. In a suspension, how can the solid solute be removed from the solvent?
3. How does water temperature affect the solubility of a solute?
4. When is a solution saturated?