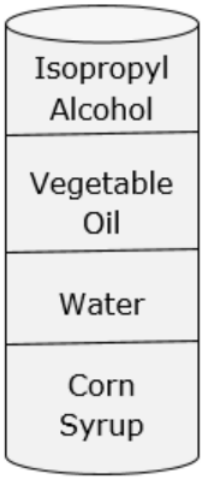
15.4: Procedures

A variety of objects will be tested to determine whether they sink or float.

Density Gradient

1. Choose whether to sketch a diagram of the system and indicate the level at which objects settle, or draw a list in which to record results. Sketch a cylinder with the layers of liquids, or start the list in which to record the level at which each object settles.



Object Float Level

Alcohol **Oil** **Water** **Syrup** **Bottom (sinks)**

Figure 15.4.1: Cylinder with the layers of liquids and list to record the level at which each object settles

2. Observe as your instructor layers the liquids in the graduated cylinder.
3. As each small object is chosen for testing, predict in your mind where the item will settle. Share your predictions among your lab team. Then observe and record the position at which each item settles when dropped into the graduated cylinder.

Ice & Fluids

4. Fill one beaker with 150 mL of water and the other beaker with 150 mL of 91% isopropyl alcohol.

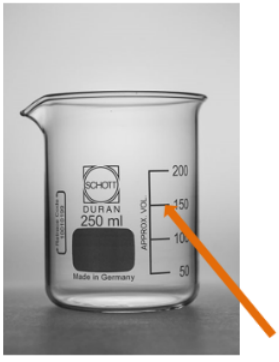


Figure 15.4.2: Image by Trudi Radtke, is under a CC BY 4.0 license.

5. Predict whether the ice will be able to float in the water and/or the isopropyl alcohol. Record your predictions.
6. Obtain 2 ice cubes and place one ice cube in each of the beakers. Record your observations for both the water and the isopropyl alcohol.

Clean-up

- Pour the ice and liquids from the 250 mL beakers down the sink
- Clean and dry your beakers

Contributors and Attributions

- Template:ContribCCPhySc101L