Bryan Guner

Chem 201

Determination of Physical properties Procedure

1. Record color, phase, crystalline form for each material.
2. Load the melting point capillary with a sample by placing a small quantity of the desired compound on clay tile or filter paper. Tap the tube into the material then flip it over and force the material in.
3. Place tube into melting apparatus and note the temperature when the material melts.
4. Using a pipet place .5-1ml of the desired liquid into a test tube with a boiling stone.
5. Heat the tube until liquid condenses on thermometer bulb and drops back and record temperature.
6. Insert assemblage into hot water or oil bath with magnetic stir bar. While stirring , increase temperature until rapid bubbles come of capillary tube.
7. Cool until bubbles stop and liquid enters the tube.

Density:

1. Add 5 ml of water to 10 ml graduated cylinder , read the volume of the liquid in the cylinder to the nearest .1ml and weigh the cylinder and contents.
2. Add the solid sample to the graduated cylinder. If the solid is to heavy, tilt the cylinder and let the solid slide into the liquid. Make sure all of the solid is below water.
3. Weigh the charged graduated cylinder. Measure new water level.
4. Draw 200-400(uL) of liquid into a micropipette, record the volume and discharge it into tared 10 ml flask. Weigh flask and contents.
5. Place 15 mg of sample into test tube and and add .5ml of solvent.
6. Stir the mixture vigorously with stirring rod for 1-2 min. Stir until the amount of solid stops decreasing visibly.