What's That Salt

Lab Prep Instructions

***GENERAL INFORMATION***

Experiment Day/Date:

Instructions: Write any calculations in the space provided, and check with the lab instructor if you have any questions. Check off each item as you prepare it.

Quantity: Amounts indicated are for a pair (amounts have been over-estimated to guarantee extra is available). Prepare enough chemicals for 15 pairs except where otherwise indicated.

***SOLUTIONS***

N/A

***CHEMICALS***

* benzoic acid (2.5 g)

-prepare enough for 5 pairs

-label as “Unknown A”, include following hazards: toxic, corrosive



* acetanilide (2.5 g)

-prepare enough for 5 pairs

-label as “Unknown B”, include hazards: toxic, irritant



* malonic acid

-prepare enough for 5 pairs

-label as “Unknown C”, include hazards: toxic



* tert-butyl alcohol (28.0 g)

-divide evenly between two labeled bottles

-warm bottles in hot water to transfer TBA (it may be frozen at room temperature)



***EQUIPMENT & GLASSWARE***

**In Lab Bins**: (total of 9 bins needed)

* Large test tube (1) see cabinet under sink in back of DANA 202
* Rubber stopper, size 4, (with two holes) with digital thermometer fit in it and glass stirring rod

-make certain rubber stopper fits in large test tube securely (1)

* Test tube clamp & clamp holder (1)
* 600 mL beaker (1)
* 250 mL beaker (1)
* 50 mL graduated cylinder (1)
* Timer (1)
* Funnel (1)
* Scoopula (1)
* Another glass stirring rod (1)

**Lab Set Up In Dana 201:**

* box of test tubes for second section to replace used ones after each lab
* 1 hot plate in hood with two beakers labeled water for warming TBA in test tubes
* 1 tray in hood for TBA bottles with bin for hot water (will need to be warmed prior to lab)
* bottles of unknowns (A, B & C) by balances

***WASTE DISPOSAL CONTAINERS***

Building: Dana

Room #: 201

Waste Accumulation Start Date: 9/19/2013

Date Container Filled: leave blank

Date moved to MAA: leave blank

Physical State(s): liquid

Chemical Waste Composition: tert-butyl alcohol (~90%) (instructor will fill in unknowns when all lab groups have completed experiment) (~8%), H2O (2%)

Hazards: flammable, toxic, corrosive

***SPECIAL INSTRUCTIONS***

Choose a plastic bottle for waste that is of appropriate size for the total volume of t-BuOH without a large amount of extra space.