**STANDARD OPERATING PROCEDURE**

**Name of procedure:** *Evaporation of Solvent Using N2 and Heat*

**Date or update of SOP:** 20170523

**Supervisor name:** Dr. Beck, John **After hours contact**: James Brown

**Designated Area:**

Procedure is located in room(s) \_\_\_\_\_\_\_\_\_.

**Personal Protection:**

* Chemical hood
* Laboratory coat
* Goggles
* Nitrile gloves

**Process (in detail):**

1. Obtain samples dissolved in solvent
2. Determine the boiling point of the solvent
3. Flexi-Vap is located in room
   1. Turn on the hot plate to 40 oC
   2. Emplace the sample containers beneath the N2 nozzles
   3. Open the N2 tank valve, then open the Flexi-Vap valve,
   4. **SLOWLY** open the nozzle gate to apply the N2 to the sample containers
   5. Once the appropriate gates are open, slowly lower the nozzles into the containers
      1. **DO NOT TOUCH THE NOZZLE TO THE CONTAINER**
      2. **DO NOT LOWER THE NOZZLE INTO THE SOLVENT**
      3. **DO NOT ALLOW THE SOLVENT TO SPLASH**
         1. If splashing occurs, close nozzle gate, raise nozzles, and reopen gates.
4. Keep N2 flow consistent above solvent to increase solvent removal efficiency.
5. Once solvent is visibly removed, hold N2 over sample for an additional 60sec to ensure dryness.

**Spill and Accident Procedure:**

**Sample Spills:**

1. Remove gloves and rinse exposed skin under running water for 10 mins
2. Record sample ID and details of spill into lab notebook
3. With gloves on, contain spill using paper towels, rinse affected area with acetone, then with water.
4. For large spills contact assigned supervisor.

**Accidents:**

1. Contact supervisor

**Hazards involved in procedure:**

Solvent exposure

Heating plate

Broken glass

Inhalation

**Special Handling Requirements:**

**Approval Required:**

**Training Documentation**

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