Principal Investigator: _____ ***Date Approved:*** _____

This document covers basic chemical safety information for sodium amide and potassium metal. The use of either sodium amide or potassium metal is subject to pre-approval by the Principal Investigator (PI) and/or Supervisor. PI and/or Supervisor may use the sheet attached to this SOP to document any lab specific training for Sodium Amide and Potassium Metal. DO NOT USE SODIUM AMIDE OR POTASSIUM METAL UNTIL YOU HAVE OBTAINED THE NECESSARY PRE-APPROVAL.

Sodium Amide and Potassium Metal

Sodium amide and potassium metal are water-reactive chemicals which may also form explosive peroxides upon prolonged storage. Sodium amide reacts with water to give off toxic ammonia gas, whereas potassium metal reacts with water to give off flammable hydrogen gas.

Personal Protective Equipment & Personnel Monitoring		
 **Lab Coat**	 **Gloves**	 **Eye Protection**
Flame resistant lab coat when working with flammable materials	Nitrile or chloroprene gloves are typically used for handling such materials. Review the chemical Safety Data Sheet with your PI or supervisor and consult glove manufacturer recommendations to ensure this applies to each specific use	ANSI Z87.1-compliant safety glasses, or safety goggles if a splash hazard is present

Labeling & Storage

Store away from acids and aqueous solutions. Primary containers should be labeled according to the UNC Charlotte Chemical Hygiene Plan. The secondary container's label must contain the chemical name and corresponding hazards. Sodium amide and potassium metal are Class 1 peroxide-formers. They must be marked with receiving date and opening date. They must be disposed of within the sooner of 12 months from the date of opening, 18 months of the date of receipt if unopened, or the expiration date as specified by the manufacturer if unopened. Sodium amide and potassium metal must be tested monthly for peroxide formation starting 3 months after opening. If the container is expired, or if receiving and opening date is not known, promptly dispose as hazardous waste.

Engineering Controls, Equipment & Materials

Glove Box

If possible, work under an inert atmosphere (e.g. argon, nitrogen) in a glove box.

Fume Hood

If no glove box is available, sodium amide and potassium metal should be handled in a fume hood under inert atmosphere. If your protocol does not permit the handing of such materials in a fume hood or glove box, contact EHS to determine whether additional respiratory protection is warranted.

Housekeeping

Spills

Notify others in the area of the spill, including your supervisor. Evacuate the location where the spill occurred. Call 911 from any campus phone (or 704-687-2200 from a cell phone). Report any exposure to EHS at 704-687-1111. Remain on-site (at a safe distance) to provide detailed information to first responders.

Decontamination

DO NOT use water to clean equipment or surfaces suspected to be contaminated with sodium amide or potassium metal. Remove any visible contamination using an inert solvent (e.g. hexanes), followed by rinsing with isopropanol.

Waste

Sodium amide and potassium metal can be disposed directly as hazardous waste. If you choose to quench these materials prior to disposal, a separate SOP is required. Refer to the UNC Charlotte Chemical Hygiene Plan for details regarding labeling and storage of hazardous waste. Note: Empty containers of PFC's can still pose a hazard, and may quickly evaporate to dryness.

First Aid & Emergencies

Fire

DO NOT use water to put out fire, instead use a Class C or Class D fire extinguisher.

Name	Signature	Date