VANDERBILT UNIVERSITY

Principal Investigator: Date Approved:

This document covers basic chemical safety protocols (CSP) for sodium amide and potassium metal and supplements the laboratory Chemical Hygiene Plan as appropriate. Additional lab-specific safety operating procedures for sodium amide and potassium metal may also be required. The use of any sodium amide and potassium metal is subject to pre-approval by the Principal Investigator (PI) and/or the designated Laboratory Responsible Safety Person. DO NOT USE ANY SODIUM AMIDE AND POTASSIUM METAL UNTIL YOU HAVE OBTAINED THE NECESSARY PRE-APPROVAL AND TRAINING.

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

Flame resistant lab coat when working with flammable materials

Gloves

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

Eye Protection

ANSI Z87.1-compliant safety glasses, or safety goggles if a splash hazard is present

Labeling & Storage

Store away from acids and aqueous solutions. 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 or sooner than 12 months from the date of opening, 18 months of the date of receipt if unopened, or by 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.

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 EHSS to determine whether additional respiratory protection is warranted.

Housekeeping

Releases	Immediately notify others in the area of the release and evacuate the location where the release occurred. Notify your PI/Responsible Safety Person and call Vanderbilt

	University Public Safety (VUPS) at 615-421-1911 or use the Vandysafe app on your smart phone. Report any exposure through Risk and Insurance Management's Origami portal and mark that it occurred in research when prompted. Both VUPS and the Origami system will notify EHSS of the incident. 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	Refer to the laboratory *Chemical Hygiene Plan* (Section 6.7) for information on proper chemical waste disposal procedures.

First Aid & Emergencies

Fire	DO NOT use water to put out fire, instead use a Class B/C fire extinguisher

Name	Signature	Date