

Lab-Specific Standard Operating Procedure (LSOP)- Template

Principal Investigator(PI):

Building(s):

Lab(s) Covered by LSOP:

Department:

Lab Phone Number(s):

LSOP Title/Description:

SECTION 1 – CHEMICAL OR LIST OF HAZARDOUS CHEMICALS

List the chemical or chemicals used in the procedure and associated hazard(s). Add more lines as necessary.

SECTION 2 – ADMINISTRATIVE CONTROLS

List the administrative controls in place to limit exposure (e.g., Is [Working Alone](#) permitted? Have researchers received appropriate training? Have researchers read applicable safety data sheets? Have “dry runs” of experiments been conducted? Can less hazardous chemicals be substituted? Is all applicable emergency equipment present and working properly?). Add more lines as necessary.

SECTION 3- ENGINEERING CONTROLS

List the engineering controls in place to reduce exposure (e.g., fume hoods, glove boxes, other local exhaust ventilation, shielding, etc.)? Add more lines as necessary.

SECTION 4 – WORK PRACTICES

List the work practices that must be followed when performing the procedure (e.g., chemical labeling, compatible lines/tubing/fittings of equipment for intended application, leak-testing, etc.). Add more lines as necessary.

SECTION 5 – PERSONAL PROTECTIVE EQUIPMENT (PPE)

List the specific PPE to be worn while carrying out the procedure (e.g., ANSI-approved safety glasses or goggles, nitrile gloves, closed-toed footwear, etc.). Add more lines as necessary.

SECTION 6 – STORAGE

List how and where the chemicals will be stored when not in use. Add more lines as necessary.

SECTION 7 – SPILL AND ACCIDENT PROCEDURES

List the procedures that must be followed in case of a spill or accident (safety data sheets and the Chemical Hygiene Plan can be used as a reference). All spills and accidents must be reported to the PI and EHS. Add more lines as necessary.

SECTION 8 – FIRST AID PROCEDURES

List the first aid procedures that must be followed in case of an accident (safety data sheets and the Chemical Hygiene Plan can be used as a reference). All accidents must be reported to the PI and EHS. Add more lines as necessary.

SECTION 9 – WASTE MANAGEMENT

List how chemical, biological/infectious, radiological or other wastes will be managed after use (e.g., label chemical waste containers with the words “Hazardous Waste” and full chemical names, keep in tightly sealed containers, etc.). The [Chemical Waste Disposal Manual](#), [Biological Safety Manual](#), and [Radiation Safety Manual](#) must be used as a reference. Add more lines as necessary.

SECTION 10 – DECONTAMINATION PROCEDURES

List how equipment, glassware, the work area and researchers (e.g., appropriate handwashing) will be decontaminated following the procedure. Add more lines as necessary.

SECTION 11 – SPECIFIC PROCEDURE

List or attach a copy of each step in the procedure and the safety controls (e.g. fume hood, PPE, etc.) in place during each step. **For example:**

| Procedure Step | Safety Control(s) |
|--|-----------------------------------|
| 1. Evacuate the reaction vessel and backfill with an inert gas (nitrogen or argon). | Do not work alone, Fume Hood, PPE |
| 2. Weigh out the chosen amount of palladium/carbon and transfer into the reaction flask under an inert atmosphere. | Do not work alone, Fume Hood, PPE |
| Insert additional steps and safety measures until procedure completion. | |

SECTION 12A. APPROVAL

I have reviewed, understand and agree to follow this lab-specific standard operating procedure (LSOP) regarding **type in chemical/procedure name**. Failure to follow the LSOP and lab-specific training guidelines for research with **type in chemical/procedure name** is a violation of the [University Health & Safety Policy](#) and [University Code of Conduct](#). Further approval from the PI/Supervisor is required if any of the following events occur:

- A change in amount (**Add volume/quantity**) or substitution of the chemicals in the procedure is planned
- A change in the agreed-upon experimental set-up is planned
- Signs of a failure in safety design or equipment are observed
- Signs or symptoms of a chemical exposure to any personnel are observed
- Unexpected and/or potentially dangerous experimental results occur (e.g., fire, uncontrolled buildup of heat and/or pressure, etc.)

| Researcher Signature | Date | Trainer Signature | Training Date |
|----------------------|------|-------------------|---------------|
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SECTION 12B. PRINCIPAL INVESTIGATOR CERTIFICATION

*I approve the contents of the lab-specific standard operating procedure listed above regarding the use of **type in chemical/procedure name**.*

PI Signature:

Date:

**A HARD OR ELECTRONIC COPY OF EACH LAB-SPECIFIC STANDARD OPERATING PROCEDURE
MUST BE READILY AVAILBALE IN THE LAB.**