

**STANDARD OPERATING PROCEDURE**

**Operation/Equipment**

According to manufacturer’s guidelines and required policies within the laboratory and university special precautions must be taken when operating equipment or performing procedures within the laboratory. The following information includes recommendations for operation and any procedures needed in order to operate equipment within the laboratory. This Standard Operating Procedure will be followed along with the requirements of the Chemical Hygiene Plan and Institutional Biosafety Manual.

Brief description of operation and/or equipment in use: **Heat Gun Operation**

**Safety Overview:**

* The exposed metal end of the heat gun is a source of extreme heat when on. Temperatures ranging from 300-700 °C are reached with a heat gun. Therefore, great caution should be used in the presence of volatile solvents. Additionally, skin contact with a heat gun metal end will cause severe burns during operation. It can also cause serious damage to loose clothing, hair, or the surrounding workspace
* Limit access to authorized users.
* Require applicable training.

**Control Plan:**

* Read and become familiar with the machine’s operating procedures before operating
* Never touch the exposed end of the heat gun when in use
* Hold the heat gun firmly
* When in use, be careful when setting down heat gun on the workbench. Don’t let the exposed end touch the workbench or other undesired surface
* Always know where the power off switch is located in case of emergency
* Always turn switch to off position and unplug when not operating heat gun
* Always disconnect the heat gun from the power source before servicing, repairing, or making any adjustments
* Wear safety glasses at all times while using the heat gun
* Wear heat-resistant protective garments to prevent burns
* Do not wear neckties, jewelry, or loose clothing, as they could come into contact with the heat gun
* Tie up long hair or wear protective hair covering to prevent hair from coming in contact with the heat gun

**Experimental Procedures**:

* Put on all safety equipment and tie back loose hair or clothing before operating
* Check to make sure all parts of machine are working and functioning properly
* Make sure heated end of heat gun is not touching undesired surfaces
* Prepare work piece for use of heat gun, use clamps or tweezers to hold work piece if desired
* Make sure all safety equipment is on correctly
* Turn on heat gun and hold firmly
* Be aware of where heat gun is pointing at all times. Only blow hot air towards workpiece When finished, turn off heat gun immediately and let cool down
* Leave work piece on workspace to cool down
* Clean workspace. Dispose of any leftover material

***PPE required:***

[x]  Skin/Body Protection (example: Lab Coat)

[x]  Eye protection

[ ]  Face shield

[ ]  Respirator (example: N95):

[x]  Hand protection (example: Nitrile gloves):

This Standard Operating Procedure must be placed in the Chemical Hygiene Plan. All laboratory personnel must be familiar with safe handling practices (i.e., training with documentation of training) when working with this equipment. This must be incorporated into the comprehensive chemical hygiene plan of the laboratory. If you have any questions regarding a comprehensive mandatory laboratory chemical hygiene plan please contact your Representative at Environmental Health and Safety (292-1284). For any other questions or concerns, please contact:

**PI contact information**

Name:

Office Phone:

Cell phone:

Date:

E-mail:

Home phone:

P.I. Signature \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_