

Autoclave, Dishwasher, Quick-Dry Oven in Room 380 Procedure

Revision ID: 1 | Date Published: 8/31/2015 | Date Effective: URL:

Since Room is for communal use it is imperative that respect be given to all individuals and the equipment in these machines.

Procedure title	Operation of Equipment in Room 380
Date of creation / revision	
Name of responsible person	Principal investigator, laboratory supervisor, or autonomous researcher
1.	This standard operating procedure (SOP) is for a
	<input type="checkbox"/> Specific laboratory procedure or experiment Examples: synthesis of chemiluminescent esters, folate functionalization of polymeric micelles <input type="checkbox"/> Generic laboratory procedure that covers several chemicals Examples: distillation, chromatography <input type="checkbox"/> Generic use of specific chemical or class of chemicals with similar hazards Examples: organic azides, mineral acids <input checked="" type="checkbox"/> Generic use of specific equipment Examples: Autoclave, drying oven, dishwasher
2.	Description
	In Room 380 there are three machines: autoclave, dishwasher, and drying oven. These are communal use. Procedures for use of the autoclave are posted on the front of the machine. There are logbooks for each piece of equipment.
3.	Risk assessment
	<p>These machines are meant to clean, dry and sterilize glass equipment. Broken glass should be swept up and placed in a broken glass container.</p> <p>Experiments entering into the autoclave should be cleaned out as much possible to prevent contamination of the room and personnel (particularly of any maintenance personnel that might have to work on a non-functioning unit). Medium that escapes the equipment in the Autoclave must be cleaned properly to prevent contamination of the room and personnel (particularly of any maintenance personnel that might have to work on a non-functioning unit).</p> <p>References: http://publicsafety.tufts.edu/ehs/files/PyrophoricSOP.pdf http://www.chemistry.ucla.edu/sites/default/files/safety/sop/SOP_Pyrophoric.pdf</p>
4.	Safety equipment
4.a.	None

4.b.	<p><u>Personal protective equipment and other safety equipment</u></p> <p><u>Skin Protection</u></p> <ol style="list-style-type: none"> 1. No open toe shoes are allowed. 2. No shorts are allowed.
------	---

4.c.	Designated area
------	------------------------

	<p><u>Safety Shower</u></p> <p>A safety or drench shower is located at the entrance to the room should contamination or other emergency require.</p> <p><u>Fire Extinguisher</u></p> <p>A fire extinguisher is located inside the room. If there is a small fire and you are trained and comfortable with use of fire extinguisher then it is permissible to attempt to control the fire until help can be obtained. In the case of a large fire or for any reason that you do not wish to try to control the fire, pull the fire alarm, evacuate the building. Contact 911, the safety officer, building manager, and necessary personnel outside the building. Describe the conditions to any of the above mentioned personnel and responders.</p> <p><u>Exhaust Fan</u></p> <p>There is an exhaust fan located on the east wall near the door. It is a round dial. Make sure when equipment is in use that this fan is running to vent any potential fumes or smoke.</p>
--	---

Item	Location
Eyewash / safety shower	Near entrance
First aid kit	N/A
Chemical spill kit	N/A
Fire extinguisher	Inside room
Exhaust Fan	Round White Dial on East Wall Near Door
Fire alarm manual pull station	
Evacuation Map	

5.	Restrictions and Incompatible Materials
----	--

IF YOU HAVE QUESTIONS ASK!

OVEN

1. Plastics are NOT allowed in the equipment
2. NMR tubes are not allowed to be dried in Quick-Drive Oven
- 3.

AUTOCLAVE

1. Do not remove other users equipment from the autoclave until their equipment has finished
2. Do not change the temperature on the autoclave
3. Do not force the door if there is resistance when opening. Hit the power release button again and then try to open the door.
4. Observe the times and procedures posted on the outside of the equipment.
5. **CLOSE THE DOOR COMPLETELY**, to prevent overflow to floor and offices below.

DISHWASHER

1. Use only compatible soap.
2. Observe the directions on the dishwasher.
3. Load the machine such that the glassware will not break in use.

6. **Protocols**

AUTOCLAVE

1. Make entry into log book, note time, name and what is put in the machine.
2. Use the tub to catch overflow.
3. Clean the walls if the medium escapes to the walls.
4. Clean as much of the experiment before putting into autoclave. Do not just put your experiment into the autoclave.
5. Do not Change the temperature.
6. Do not force the door if there is resistance.
7. Do not remove other user's material until their equipment is finished. Wait your turn.
8. Make sure the exhaust fan is on when using equipment.
9. If the machine is not working, place the sign and the front and contact Fred Fuchs (277-1858) or Bobby Ortiz (505 277-0387 or 505-604-6120) IMMEDIATELY

DISHWASHER

1. Make entry into log book, note time, name and what is put in the machine.
2. Use only compatible soap.
3. Observe the directions on the dishwasher.
4. Load the machine such that the glassware will not break in use.
5. Make sure the exhaust fan is on when using equipment.
6. If the machine is not working, place the sign and the front and contact Fred Fuchs (277-1858) or Bobby Ortiz (505 277-0387 or 505-604-6120) IMMEDIATELY

OVEN

1. Make entry into log book, note time, name and what is put in the machine.
2. DO NOT PUT NMR TUBES in the oven.
3. DO NOT PUT any type of plastic in the oven.
4. Load the machine such that the glassware will not break.
5. Make sure the exhaust fan is on when using equipment.
6. If the machine is not working, place the sign and the front and contact Fred Fuchs (277-1858) or Bobby Ortiz (505 277-0387 or 505-604-6120) IMMEDIATELY

7. **Special handling procedures**

None

8. **Emergency procedures**

1. **Emergencies** (for example, fire, smoke spill or release)
 - a. **Call 911.**
 - b. Alert people in the vicinity and activate the local alarm systems.
 - c. Evacuate the area and go to emergency assembly point (EAP).
 - d. Remain nearby to advise emergency responders.
 - e. Chemical Safety Coordinator.
 - f. Provide local notifications.

2. If personnel exposed

- a. Flush contamination from eyes/skin using the nearest shower for a minimum of 15 minutes
- b. Remove any contaminated clothing.
- c. In the event of life-threatening emergency:
 - i. Call 911.
 - ii. Alert people in the vicinity and activate the local alarm systems.
 - iii. Evacuate the laboratory and turning off ignitions sources if safe to do so.
 - iv. Go to emergency assembly point (EAP).
 - v. Remain nearby to advise emergency responders.
 - vi. Contact SRS, UNM Police, PI, and Chemical Safety Coordinator.
 - vii. Bring to the hospital copies of safety data sheets (SDSs) for all chemicals to which the victim was exposed.
- d. In event of a non-life threatening emergency:
 - i. Administer first aid as appropriate.
 - ii. Alert people in the vicinity
 - iii. Remain nearby to advise emergency responders.
 - iv. Contact SRS, UNM Police, PI, and Chemical Safety Coordinator.

Additional emergency procedures

Describe additional, local emergency procedures.

9. Waste disposal

Identify amounts of waste anticipated and appropriate disposal procedures. Segregate waste by hazard class (for example, flammable, corrosive) and state (solid, liquid), label appropriately, and place in the laboratory's hazardous waste cabinet.

N/A

Additional waste guidelines

Describe additional, local waste guidelines.

10. Training requirements

List the general and laboratory-specific training required

- Hazard Communication
- Hazardous Waste Management
- Glove Box Training
- Basic Safety Training
- Other: _____

Additional training requirements

List additional, local training requirements.

1. Additional training requirement

Additional training requirement

11. Approval

Standard operating procedures must be approved by the laboratory manager and directorate safety coordinator.

Laboratory manager (name, signature, date): _____

Directorate safety coordinator (name, signature, date): _____

Additional approvals

List subject matter experts consulted for approval:

1. Person consulted

Person consulted

Additional prior approvals required

List any tasks that require prior approval by the principal investigator or laboratory manager (for example, use of restricted chemicals and other higher hazard chemicals and running of higher hazard operations):

1. Task requiring prior approval

Task requiring prior approval