

DEFROSTING LABORATORY REFRIGERATORS AND FREEZERS

(For assistance, please contact EHS at (402) 472-4925, or visit our web site at <http://ehs.unl.edu/>)

Occasionally, it is necessary to defrost a laboratory freezer or refrigerator. To prevent injury and/or contamination from items in the freezer or refrigerator during this process, observe the following precautions.

- Disconnect electrical power to the unit.
- Wear appropriate personal protective equipment for anticipated hazards (i.e., microbes, radiation, hazardous chemicals, etc.), which may include gloves, laboratory coat, and goggles.
- Remove all materials from the unit and place them in another unit, walk-in cooler, or portable cooling chest until the unit is back in service.
- If the unit is used to store biological, radioactive, or hazardous materials, make sure that the inside of the unit is decontaminated before defrosting. Consider placarding the unit with the tag at the end of this SOP.
 - ❖ For biological materials, spray the inside thoroughly with a non-corrosive disinfectant.
 - ❖ For radioactive materials, you must survey the unit for activity. If activity above the action level is indicated, call the Radiation Safety Officer at 472-4925.
 - ❖ For hazardous chemicals, be sure that there are no spill residues present.
- Pull the unit out from the wall or remove the lower panel and vacuum dust from the coils.
- Remove and clean the condensate collection pan (this can be a site where mold grows.)
- Set a pan of warm water in the unit and close the door for 30 minutes to loosen the built-up ice. You can also place a fan in front of the open door to the unit to loosen the ice.
- Ensure that as the ice melts, it is collected in an appropriate container. Most models are equipped with a short hose connected to a discharge port. Take the plug out of the discharge port and place the hose into a receptacle to contain the water produced in the defrosting process. (Remember to replace the plug when returning the unit back into service.) If there is no discharge port, use a squeegee, sponge, or other item to transport water to an appropriate container. If there are spills on the floor, ensure that they are wiped up to prevent a fall.
- The water can be poured down the laboratory drain unless the water is knowingly contaminated, in which case call EHS at 472-4925 for assistance.

- Clean all surfaces with soap and water.
- When finished, carefully move the unit back into place. You may need to reset the leveling devices at each corner on the bottom of the unit. Call the Facilities Management Service Desk at 472-1550 for assistance, if necessary. These units can be heavy so you may need help with moving them.

Note: In cases where units will be taken out of the laboratory to an outside dock, or similar area, for defrosting, it is imperative all of the procedures above are followed. Do not allow any contaminated materials to go onto the ground or down a storm sewer. If you have any questions, please call EHS.

Biological Materials

- Not Applicable
- This unit was disinfected by _____(name) on
_____ (date).

Radioactive Materials

- Not Applicable
- This unit was surveyed by _____(name) on
_____ (date) and found to be clean.

Hazardous Chemicals

- Not Applicable
- This unit was cleaned by _____(name) on
_____ (date) and was found to contain no residues of hazardous chemicals.