



## Defrosting Freezers

### **1. Purpose:**

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To provide step by step guidance on defrosting freezers in the LM-CL2 facility (DB440).

### **2. Scope:**

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Applies to all authorized Principal Investigators (PIs) and authorized laboratory personnel working in the LM-CL2 facility.

### **3. Prerequisites:**

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You are an authorized user of DB440 and are either included in your PI's permit, or you possess a CL2 permit for DB440.

### **4. Responsibilities:**

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It is the responsibility of all faculty, staff and students to follow the procedures described in this SOP.

### **5. Personal Protection Equipment (PPE):**

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### **6. Procedure:**

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**NOTE:** If it is your first time defrosting the freezer, ask your PI or a senior student/PDF to help guide you through the procedure.

**NOTE:** Have all the materials available before defrosting the freezer. Some of these materials include: absorbent materials for water spills (e.g. paper towels, absorbent pads) and trays that fit inside the freezer to collect melting ice.

- 1) Unplug the freezer as early as possible **in the morning**. **DO NOT defrost overnight.**
- 2) Wear PPE as described above. Remove all the items from the freezer and place them in another freezer (you can request a loaner by contacting [chem.safety@utoronto.ca](mailto:chem.safety@utoronto.ca)).
  - i) NOTE: Ensure that the secondary freezer is at the desired temperature (plan ahead).
- 3) Scrape loose ice pieces with a plastic scraper into a tray and dispose them into the sink.
  - i) Ensure that you do not damage the interior of the freezer during this process.
  - ii) Ensure that you do not use sharp tools to scrape.
- 4) Place trays on the bottom shelf of the freezer in order to collect any melting ice from the top shelves and walls.
- 5) Place absorbent material on the floor around the freezer. **DO NOT use supplies from the spill kit (each group is responsible for obtaining their own absorbent materials).**
  - i) If you're using absorbent pads, make sure the absorbent side is facing upwards.
- 6) If necessary, to prevent water spillage on the floor due to melting ice, place a tray on the floor outside the freezer and use absorbent materials to guide the water to the tray.
  - i) Refer to the photo below on how this can be set up.



- 7) When all the ice has become soft enough, scrape the ice pieces with a plastic scraper into a tray and dispose them into the sink.
  - i) Ensure that you do not use sharp tools to scrape.
- 8) When all the ice has melted and there is no more water leaking, dry the interior surfaces of the freezer with paper towels and plug it back on.