

Routine Maintenance of TC Incubator

1. Purpose

To provide step by step guidance on how to properly clean TC incubator

2. Scope

Applies to everybody working in DB440.

3. Prerequisites

WHMIS, EHS601 Laboratory Biosafety, DB440 SST

4. Responsibilities

Principal investigators are responsible for enforcing this SOP and lab-personnel are responsible for complying.

5. Personal Protection Equipment (PPE)



6. Procedure

Weekly Maintenance

- 1) Check incubator for any signs of contamination.
- 2) Empty water tray. Wash with soap and water. Wipe with 70% ethanol.
- 3) Change the incubator water (not just refill it, but empty and add fresh, sterile, distilled water). Do not use tap or ultra-pure water.
- 4) Ensure nothing is stored on top of the incubator and clean the top of the unit every two weeks to remove dust. Wipe down the doors and handles with 70% ethanol or 2% quaternary ammonium.

Every 6 Months

- 1) Clean the incubator every 6 months. It is not necessary to autoclave everything; spray or wipe down the incubator with 70% ethanol or 2% quaternary ammonium, especially the water tray (do not spray ethanol on sensors). Allow to air dry. Water tray may be autoclaved.
- 2) Clean the incubator exterior with a damp sponge or soft, well-wrung cloth and mild detergent dissolved in water. Dry with a soft cloth.

Disinfecting the Incubator Interior (Thorough Cleaning) (Annual Maintenance, or for Recurrent Contamination)

- 1) Turn the incubator off and disconnect the plug from the power source.
- 2) Remove the shelves.
- 3) Wipe the shelves with disinfectant (2% quaternary ammonium) and rinse with water. Wash with soapy solution, and rinse with water. Spray with 70% ethanol or 2% quaternary ammonium and leave to air dry. Option: Autoclave shelves (recommended).
- 4) Wash the cabinet interior with disinfectant starting at the top and working down. Wash the inner door both inside and out. The cabinet and door must be rinsed with sterile water until the disinfectant has been removed. After the cabinet has been rinsed, spray with 70% ethanol or 2% quaternary ammonium.
- 5) Install the shelves and spray with 70% ethanol or 2% quaternary ammonium.
- 6) Plug the incubator in and turn the power switch on. Allow the unit to run empty for 24 hours before returning to service.

A service contract for annual replacement of the HEPA filter and calibration is recommended (if done in-house, refer to the operation manual).

References

- [Best Practices for CO2 Incubator Maintenance | American Laboratory](#)
- Thermo Electron Corporation: Model 3110 Series*Forma Series II Water Jacketed CO2 Incubator Operating and Maintenance Manual