
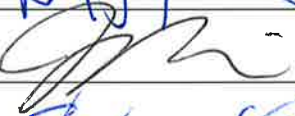





OFFICE OF LABORATORY ANIMAL CARE

STANDARD OPERATING PROCEDURE

SOP Number:	614	Tuttnauer EZ10 Autoclave Operation and Maintenance	Revision #:	0
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PURPOSE

The purpose of the following SOP is to outline the maintenance and operation of the Tuttnauer autoclave.

SCOPE

These procedures apply to the OLAC veterinary staff and serve to guide the use and upkeep of the machinery.

RESPONSIBILITY

The OLAC veterinary staff is responsible for operation, maintenance, quality control, and training autoclave users in laboratories. All users are responsible for operating the autoclave in accordance with training and following proper procedure.

PROCEDURE

1. Autoclaving Procedure
  - a. Ensure that items to be sterilized are autoclavable.
    - i. Not all plastics can be autoclaved. Plastic types can be identified by looking for initials imprinted on the container bottom.
    - ii. Safe to use: Polypropylene (PP, recycle #5), Polycarbonate (PC, no recycle number assigned)
    - iii. Do not use: Polyethylene (PE, recycle #1), High-density polyethylene (HDPE, recycle #2).
    - iv. If you're unsure about a new item, place it in a metal or other autoclave safe secondary container.

- b. Package and label all items appropriately.
  - i. Paper packages should be airtight, completely sealed, and must contain a sterilization indicator dot.
  - ii. Items should be labeled with the operator's initials and with the expected expiration date of the items' sterility. Expiration dates are one year from the time of autoclaving.
  - iii. If the package becomes torn or wet, the item is considered no longer sterile and must be re-autoclaved.
  - iv. Inspect all items prior to use. Any item that is wet, torn, dropped on the floor, or damaged in any way should not be used.
- c. Check the autoclave reservoir and add deionized (DI) water if the level is low. The safety valve at the top of the reservoir must be visible and not covered with water.
- d. Place items inside the chamber without crowding the packs to allow steam penetration.
- e. Turn the autoclave power on and select the appropriate preprogrammed cycle for the type of load.
  - i. Instruments- paper packs
  - ii. Gown/Dress- wrapped packs
  - iii. Beaker- liquids
- f. Close and tighten the chamber door until fully hand tight. The green light on the panel indicating "door closed" is not an indicator that the door is tightly sealed.
- g. Press start to begin cycle.
- h. Once "CYC Finish" is displayed, the door may be opened and items removed.
  - i. Don heat resistant autoclave gloves (located in the drawer under the machine) when reaching inside the chamber.
  - ii. Use caution as the chamber and its contents remain hot enough to burn the operator for some time after the end of the cycle.

## 2. Autoclave Cleaning

- a. Clean the autoclave monthly or when debris/buildup accumulates inside the chambers.
- b. Drain the reservoir via the valve on the left front corner of the chamber.
- c. Place a mixture of an approved cleaning solution and DI water in the reservoir.
- d. Run an unwrapped cycle.
- e. Allow the machine to cool.
- f. Wipe down the shelves and chamber interior with a damp cloth and scrub, if needed, with a rough sponge to remove buildup.
- g. Drain the reservoir and fill with DI water.
- h. Run another unwrapped cycle to rinse the chamber.
- i. Wipe down with a clean cloth.
- j. Drain the reservoir and refill with regular DI water.
- k. Update the Autoclave Cleaning record in the Autoclave log book upon completion.

## 3. Validation Testing

- a. Perform validation testing monthly per SOP #615.

**REFERENCE DOCUMENTS**

- SOP 615- Autoclave Validation Testing

REVISION HISTORY			
REVISION NUMBER	AUTHOR(S)	EFFECTIVE DATE	REVISION(S)