



TITLE: Prepping and Sterilizing Bottled Water

SOP Category: Gnotobiotic

CMR SOP #: 4.16

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Approval: *LaTisha V. Moody, DVM, DACLAM*

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SCOPE:

This document describes the procedures to be followed when prepping sterile water for the gnotobiotic facility. This SOP applies to all Gnotobiotic staff (GS), Animal Care Staff or Supervisors (ACSS), and Veterinary Staff (VS) at the Rutgers University facilities.

OBJECTIVE:

The objective is to describe procedures to prepare sterile bottled water for the gnotobiotic facility.

PROCEDURES:

Wash Water Bottles

1. Put dish detergent inside the bottle and fill the bottle with municipal water. Using a different sponge, clean the outside of the bottle using the scrubber side of the sponge.
2. Use a bottle brush to scrub the inside of the bottle.
3. Rinse soap from the bottle thoroughly using municipal water.
4. Scrub the caps with dish detergent and rinse the caps of the bottle.

Water Tank Operation

1. Refer to *SOP 4.07 How to Use the Water Bottle Filling Station* for details on how to turn the water bottle filling station.
2. Turn on the water tank prior to using the bottle filler by flipping the switch up to the on position. The water tank is typically turned off at the end of the business day.
3. **DO NOT** run the autoclave and bottle filler at the same time.

Using the Bottle Filler Station

1. Line up clean glass bottles under the spickets of the bottle filler.
2. Move the yellow lever to the up/vertical position to start the bottle filler.

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3. Fill the bottles to the top of the rim with RO hyperchlorinated facility water. When filled, move the yellow lever down to the horizontal position to stop the bottle filler.
4. Place the cap onto the bottles and secure tightly.

Loading bottles into the MSB walk-in Autoclave

1. Place bottles on an autoclavable bulk truck or autoclavable cart and place them inside of rat shoebox cages. Place 8 bottles inside each cage and place 4 cages containing 32 bottles on the cart for autoclaving. Place the Omega high temperature datalogger probe into the center of the load.



2. Open the door of the autoclave and push the load into the large autoclave.
3. Close the MSB walk-in autoclave door and select Gnotobiotic water "Cycle 08 GB Liquid" (sterilization time: 45 minutes).

Loading bottles into the Gnotobiotic Autoclave

1. Place 12 bottles on the autoclave rack and space the bottles staggered apart. Place the Omega high temperature datalogger probe into the center of the load.



2. For the Gnotobiotic autoclave, select liquid cycle #2.

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Removing Water Bottles from the Autoclave

1. Once autoclave cycle is completed, press “open door.”
2. Heat resistant gloves should be placed over your gloved hands and used to pull out the rack containing the water bottles.
3. Remove the water bottles from the autoclave.
4. Roll the autoclavable cart into the gnotobiotic facility prep area.
5. Log appropriate information onto the *visual clearance labels* and place label adjacent to the load using a dry erase marker:
 - a. Item: Water
 - b. Autoclave: use abbreviation of autoclave name
 - c. Date autoclaved
 - d. Check the box marked “not cleared”

Item: _____	
Date autoclaved: _____	Load #: _____
Date cleared: _____	Autoclave: _____
<input type="checkbox"/> cleared	<input type="checkbox"/> not cleared
<small>Autoclave Names: G – Gnotobiotic autoclave, BH – biohazard autoclave, LG – Large walk-in autoclave MSB, CC – Large walk-in</small>	

6. Remove the datalogger and upload the information according to the *SOP #4.32 How to Use Datalogger*.
7. Once the load is confirmed that a minimum temperature of 121°C for 45 minutes sterilization time was reached, check the box marked “cleared” load. If the load does not reach 121°C for 45 minute sterilization time the load cannot be cleared for use.