

TITLE:

**AUTOCLAVE SAFETY CHECKLIST****PRIOR TO LOADING**

- If malfunction(s) were noted in the last entry of the autoclave logbook or a “DO NOT USE!” sign is posted on the autoclave, contact the laboratory manager, otherwise proceed.
- Verify the pressure is at 0 psi and the temperature is safe before inspecting the chamber for any items left inside.
- The chamber drain strainer must be free of debris. Clean if needed.
- Inspect the door gasket. If cracks or deterioration are seen, report this to the laboratory manager.
- DO NOT autoclave flammable liquids, explosive materials (e.g. cellulose nitrate tubes), corrosives (including bleach), radioactive material, polystyrene (e.g. polystyrene tubes), polyethylene, polyvinyl chloride, nylon, acetal plastic, acrylic, or toxins. If an autoclave is found containing these materials and they cannot be safely removed, call the EHSO Spill Team at 404-727-2888.**

**LOADING**

- Use an autoclave-rated tray as secondary containment to protect the autoclave chamber.
- Solids should be packaged in *steam permeable* material such as paper, peel pouches, or pack wrap to ensure that steam penetrates the packaging for sterilization.
- If autoclaving liquids, the container should be autoclave-rated plastic or type-I borosilicate glass (e.g. Pyrex), filled no more than 2/3 full and capped with vented closures or aluminum foil. Autoclave threaded (non-vented) lids separately to avoid pressurizing bottles.
- When autoclaving liquids, the *liquids/slow exhaust* setting must be selected.**
- Record the cycle start time and any notes from your autoclave visual inspection in the autoclave logbook.

**DURING THE CYCLE**

- If steam escapes around the door or the jacket pressure fails to reach 15 psi or prematurely falls below 15 psi during the cycle, contact the laboratory manager.
- If the temperature target is not reached [e.g. 121°C (250°F)] or temperature is erratic, contact the laboratory manager.
- Report any leaks (leaking valves etc.).

**UNLOADING**

- The following PPE must be used: laboratory coat, gloves, eye protection, and heat-insulating gloves.
- When autoclaving liquids **a face shield and liquid-resistant apron must be worn, in addition to autoclave gloves.**
- Upon cycle completion
  - Confirm that the temperature has dropped and the pressure is at 0 psi.**
  - With your body away from the opening**, open the door slightly to allow steam to escape.
  - If there is excessive steam after opening the door, contact the laboratory manager.
  - Allow items to cool in the autoclave for at least 10 minutes before fully opening the door.
  - There should be no water on the floor or in the chamber after the cycle is complete.
  - If articles are very wet after a dry cycle (fast exhaust), contact the laboratory manager.
- Check the printout to verify that all cycle stages were successfully achieved.
- Chloride-containing solutions, including saline solution, cause autoclave chamber corrosion. If salt solutions were processed, the chamber should be wiped clean.
- Record the completion time and any notes in the autoclave logbook.
- If the autoclave is malfunctioning, post a “DO NOT USE!” sign and notify the laboratory manager.
- Report any accidents/incidents using Emory’s Workplace Health (HOME) portal <http://leo.cc.emory.edu/>