

Questions?  
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# SAFETY GUIDE FOR AUTOCLAVE USE

An autoclave is capable of rendering items sterile of any living organisms by using hot, pressurized steam and are commonly used by laboratory personnel to sterilize glassware and instruments, media and solutions, and biohazardous waste. Learn about the hazards associated with autoclave use: heat, steam, and pressure; and know how to protect yourself before operating an autoclave. **Do not operate an autoclave until you have been trained in how to do so safely**

## PPE

- **Always use personal protective equipment (PPE) when using an autoclave. This includes preparation, loading, operating, and unloading.**
- **Wear a lab coat and apron, heat-resistant gloves, safety glasses or goggles, and a face shield.**
- **Be sure your arms are covered by a lab coat and longer heat-resistant gloves to prevent burns from heat and steam.**



## PREPARE ITEMS

- **Do not autoclave FLAMMABLE, COMBUSTIBLE, REACTIVE, CORROSIVE, TOXIC, OR RADIOACTIVE MATERIAL. Contact EHS for disposal of hazardous materials.**
- **Not all plastics can be autoclaved. Check compatibility.**
- **Inspect glassware. Do not autoclave if cracked or compromised.**
- **For liquids, leave caps loose or cover with foil to allow steam penetration and prevent explosion.**
- **For bagged items, loosely tape or tie closed. Leave an opening for steam to penetrate bag. For decontamination of biological waste in biohazard autoclave bags attach autoclave tape if not using an indicator strip.**



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## Load

- Inspect for spills/debris inside autoclave, check door gasket for cracks or bulges.
- Clean the drain screen of debris.
- If problems are found, contact the Building Services Manager before use.
- Turn the autoclave on, and allow time for the jacket to reach sufficient temp & pressure.
- Place items in an autoclave tub on rack. Never place items directly on the autoclave racks, bottom, or floor.
  - Always use secondary containment in case of spillover.
- Do not overload the autoclave. Allow sufficient space between items for steam penetration.

## OPERATE

- Select the appropriate cycle on the touch screen.
- Do not try to open the autoclave door during a cycle!
- If necessary, abort the cycle and wait until the chamber depressurizes.
- If a cycle fails, notify the Building Services Manager of the problem. Items may not be decontaminated!



## UNLOAD

- Check unit's display screen to verify a successful run.
  - Ensure that chamber temperature has dropped, and pressure is zero.
  - Slowly open door to allow steam to escape. Keep your face away from door.
  - Allow items to stand for at least 10 minutes
- Cautiously remove items, place in a safe area to cool, not agitating containers to avoid possible explosions.
- Bottles containing liquids should be cool to the touch before removal.
- Record cycle info on autoclave log sheet or logbook.

