

DuPage County Environmental, Safety, Health & Property Loss Control Program Autoclave Safety Guideline

Purpose: Inform users and their supervisors the safe process for using an autoclave.

Procedure: As an autoclave is designed to deliver heat under pressure to a chamber used to decontaminate or sterilize the chambers content it is imperative to always follow manufacturer's safety information.

Personnel Protection Equipment (PPE) to be worn by staff operating autoclave is:

- Safety glasses with full face shield to prevent facial steam burns.
- Heat resistant gloves worn when loading and unloading the autoclave to prevent burns.
- Latex or nitrile gloves to prevent contact with contaminated instruments.
- Lab coats (long sleeves to protect wrist and forearms from steam burns).

Note: while the trays maybe cool, the door and walls of the chamber may still be hot enough to cause a burn.

Examples of items that CAN NOT be placed in an autoclave are: solvents, volatile chemicals, chlorinated compounds or corrosive chemicals. Most plastics such as polystyrene (PS) polyethylene (PE) and high density polyethylene (HDPE), radioactive material.

Unloading is the time of greatest risk of injury due to burns, exposure to vapors, breaking glassware if the autoclave door is opened too quickly and sufficient time is not provided for glassware to approach room temperature.

1. Never open door unless pressure gauge is reading zero (0).
2. When opening door stand directly behind door to reduce risk of being struck by steam escaping.
3. Open door slowly—if bubbling or boiling is present, wait until it subsides before removing contents.
4. After every use close door but do not seal it as this will shorten the life span of the rubber gaskets on the door.