



Autoclave Standard Operating Procedure (SOP)

In case of fire: Fire Alarm is at bottom of stairs; Fire Extinguisher is outside the Basement restrooms.

AUTOCLAVE INFORMATION																			
Make/Model	PRIMUS Sterilizer	Building & Room	Clark B09																
Designated Responsible Person	Bobby Ortiz	Phone	505-604-6120																
MAINTENANCE INFORMATION																			
Maintenance Schedule	Quarterly	Contact	Stephanie Wright																
Company	Southwest Sterilizers	Phone Number	505-750-3539																
PERSONAL PROTECTIVE EQUIPMENT (PPE) REQUIRED																			
Splash goggles, Heat-resistant gloves; DO NOT WEAR LAB COATS OUTSIDE OF YOUR LAB.																			
PREPARING THE ITEMS		PREPARING THE AUTOCLAVE																	
<ul style="list-style-type: none"> Ensure items are compatible. Inspect glassware for cracks. Leave caps on liquids loose to avoid explosion. Cover uncapped bottles or flasks with foil. Affix autoclave tape to items. Bring items on cart by elevator, not stairs. 		<ul style="list-style-type: none"> Inspect the door gasket for cracks or bulges. If off, turn on the power, allow time for the jacket to reach sufficient temp and pressure. If any problems are found, contact Bobby and note the problem in the logbook. 																	
LOADING THE AUTOCLAVE																			
Always use secondary containment in case of spillover. Do not overfill the autoclave.																			
OPERATING THE AUTOCLAVE		Cycles (by sterilize time and type)																	
<ul style="list-style-type: none"> Gently close the door. Wait until 'Ready' light, then select cycle. Keep even pressure on door until it seals. Wait through 'Purge' step to ensure autoclave begins properly. Fill out logbook. If the cycle fails, notify Bobby and follow the back-up plan. 		1234567	<table border="1"> <tr> <td>20 mins</td> <td>Non-liquid (glass/plastic/metal ware)</td> </tr> <tr> <td>15 mins</td> <td>Liquid; very small amount</td> </tr> <tr> <td>20 mins</td> <td>Liquid; less than 1 L</td> </tr> <tr> <td>30 mins</td> <td>Liquid; more than 1 L</td> </tr> <tr> <td>40 mins</td> <td>Liquid; much more than 1 L</td> </tr> <tr> <td>20 mins</td> <td>Fast exhaust</td> </tr> <tr> <td>30 mins</td> <td>Fast exhaust</td> </tr> <tr> <td>15 mins</td> <td>Dry</td> </tr> </table>	20 mins	Non-liquid (glass/plastic/metal ware)	15 mins	Liquid; very small amount	20 mins	Liquid; less than 1 L	30 mins	Liquid; more than 1 L	40 mins	Liquid; much more than 1 L	20 mins	Fast exhaust	30 mins	Fast exhaust	15 mins	Dry
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<i>Unless the Procedure/Manufacturer says otherwise; Cycles 1, 3, and 4 are most used.</i>																			
UNLOADING THE AUTOCLAVE		INCIDENTS & NEAR MISSES																	
<ul style="list-style-type: none"> Wear PPE to protect from heat and steam. Once cycle is 'Complete', slowly open door to allow steam to escape gradually. (Keep your face away from the door.) Cautiously remove items. Slide door shut. Add 'Time Out' to logbook. Return to lab and place in a safe area to cool. 		<ul style="list-style-type: none"> In the event of an accident, provide first aid. Report any incidents or near misses to the safety coordinator, your supervisor, and EHS. Use the Incident/Near Miss QR code on the back of the door to report. 																	
		BACK-UP PLAN																	
		Use alternative autoclave at Casterter Hall (see Walker lab for help).																	

Autoclave Compatibility Guidelines

COMPATIBLE

- Tissue Culture Flasks
- Glassware
- Pipette tips
- Media Solutions
- Polypropylene
- Polycarbonate
- Stainless steel

INCOMPATIBLE

- Acids, bases and organic solvent
- Chlorides, sulphates
- Chlorine, hypochlorite, bleach
- Non-stainless steel
- Nylon, acrylic
- Polystyrene (PS)
- Polyvinyl chloride (PVC)
- Polyethylene (PE)
- Low/High Density Polyethylene (LDPE/HDPE)
- Polyurethane

NEVER AUTOCLAVE

- Flammable, reactive, corrosive, toxic or radioactive materials
- Household bleach
- Any liquid in a sealed container.
- Any material that touches the interior surfaces of the autoclave.
- Paraffin-embedded tissue.

Glass: Only Pyrex or Type I borosilicate glass is autoclavable. When autoclaving liquids in Pyrex® containers, do not fill more than 2/3 full and do not seal the container.

Plastic: Polypropylene is an inexpensive resin that can resist autoclave temperatures. Polycarbonate can also withstand high temperatures.

Stainless steel: Most metals are designed for extreme conditions and are intended to be sterilized.

Media Solution: No liquid should be sealed in a container and autoclaved. Fill 2/3 of the container and loosen caps. They should be autoclaved in a steam producing cycle.

If you are unsure or are using a new material, please check with the manufacturer to determine if it is autoclave compatible.

I have read and understand the content of this AUTOCLAVE Standard Operating Procedure:

Name	Signature	Date