



QUALITY CONTROL CHECKLIST FOR BIOLOGICAL INDICATOR TEST

Maintain this checklist in your lab for six years. For questions, contact an EH&S Biosafety Officer at ehsbio@uw.edu or 206.221.7770.

Autoclave make/model:		Location (building/room number):	
Lab/Facility name:		Principal Investigator/Supervisor name:	
Person responsible for autoclave:		Phone number:	
Email:		Location of autoclave records:	

Year:		Biological Indicator		Brand and Expiration Date	Cycle Time	Sterilization Temperature
Month	Day	Autoclaved Indicator	Positive Control			
January						
February						
March						
April						
May						
June						
July						
August						
September						
October						
November						
December						

INTERPRETATION OF RESULTS		
Autoclaved Indicator	Positive Control	Meaning
No growth	Growth	Sterilization of spores achieved.
Growth	Growth	Autoclave cycle failure; troubleshoot autoclave and get repairs if needed. Test again with new biological indicators.
Growth	No growth	Operator error; test again with new biological indicators.
No growth	No growth	Indicator may be expired; test again with unexpired biological indicators.



BIOLOGICAL INDICATOR TEST INSTRUCTIONS

Monthly biological indicator monitoring is required for all autoclaves used for sterilization of biohazardous waste at UW. This test validates that the autoclave is sufficiently inactivating biological or infectious materials.

EQUIPMENT	
Biological indicator	Use <i>Geobacillus stearothermophilus</i> (previously named <i>Bacillus stearothermophilus</i>) spore strips or ampoules with an average population of 10 ⁴ to 10 ⁶ organisms.
Supporting laboratory equipment as needed	May include (depending on spore product in use): <ul style="list-style-type: none"> ▪ Incubator or heat block ▪ Refrigerator ▪ Culture media ▪ Glassware
Quality Control Checklist	Use to records results.
PROCEDURE	
1. Place indicator in center of load.	
2. Select cycle used for sterilization of biohazardous waste. The cycle must include a minimum temperature of 121°C or 250°F for 30 minutes or longer , depending on size and compaction of the load. The full cycle time will take 60-90 minutes	
3. Record chamber temperature on the Quality Control Checklist.	
4. Remove indicator when cycle is complete and load is cool enough to handle.	
5. Follow manufacturer’s instructions for activating and incubating the indicator. Remember to incubate a non-autoclaved indicator as a positive control.	
6. Record results on Quality Control Checklist.	
7. If growth occurs in the processed indicator, the autoclave has not inactivated the spores. Immediately contact the person responsible for the autoclave. The autoclave must remain out of service until a successful biological indicator test is achieved. The responsible person must inform users not to use the autoclave and post a “Do Not Use” sign while the autoclave is out of service.	
8. Maintain the Quality Control Checklist in the lab/facility for six years.	