

Toxin Destruction

Please complete this form for the final destruction of your Toxin stocks. Before you do so, contact the Environmental Health and Safety to verify the procedure and arrange for an EH&S witness. Per 42 CFR 73.7(h) and 73.21, the U.S. Department of Health and Human Services must be notified in writing of any destruction for the purpose of discontinuing activities of a Select Agent or Toxin five (5) business days prior to destruction. Please call EH&S if you have any questions.

Principal Investigator:		Phone:	
Department:		Laboratory location (building & room):	
Toxin Description:			
Use <input type="checkbox"/> Biomedical Research <input type="checkbox"/> Medical <input type="checkbox"/> Vaccine (inactivated form) <input type="checkbox"/> Clinical specimen <input type="checkbox"/> Other—please describe ⇒		Exemption Status <input type="checkbox"/> 42 CFR 73 Exempt <input type="checkbox"/> 42 CFR 73 Non-exempt Registration <input type="checkbox"/> 42 CFR 73 Registered <input type="checkbox"/> Not registered	
Destruction Procedure (see below or describe alternative procedure and provide reference):			
Destroyed By (Print Name):		EH&S Witness (Print Name):	
Destroyed By (Signature):		Signature of EH&S Witness:	
Signature of Principal Investigator:		Date Destroyed:	
I certify that the agent is accurately described (attach Safety Data Sheet if available) and that it is no longer in my possession or in possession of persons who work under my direction.			
After destruction, please dispose of residue via Environmental Health and Safety.			
EH&S contact for destruction: Shelley Jones 928-523-7268		Transfer Request Date:	Date of EH&S Pickup:

After completion, please forward this form to EH&S and keep a copy for your records.

Procedure for Select Agent Toxin Destruction

Security Precautions:

- The select agent must be secure at all times—even when in storage prior to disposal.
- Destruction of source material must be witnessed by an EH&S staff member. Call to arrange a destruction meeting.

Safety Precautions: Destruction procedures should be performed in a laboratory hood or a biological safety cabinet. At a minimum, Personal Protective Equipment for all procedures should include:

- Disposable long-sleeved protective clothing (gown, coverall or similar garment).
- Appropriate gloves
- Eye protection

Tetrodotoxin, Staphylococcus Enterotoxin B, Ricin, Aflatoxin: Destruction in 2.5% NaOCl (sodium hypochlorite). Use a fume hood, and lower sash to lowest possible working level. Place a warning/do not use sign on hood during the procedure.

1. In a fume hood, Place plastic backed absorbent paper on bottom of hood
2. The Toxin should be in solution in primary container
3. Place primary container in secondary container, such as a beaker
4. Slowly dispense an equal volume of full strength bleach into solution
5. Do not place cap on primary container
6. Allow 30 minutes exposure time

Staphylococcus Enterotoxin B, Ricin, Botulinum: Use autoclave for heat destruction.

1. In a fume hood or biological safety cabinet, loosen cap of primary container
2. Place primary container into secondary container, such as a beaker
3. Place container into a biohazard autoclave bag
4. Place bag into autoclavable tray
5. Autoclave at 121° C for 45 minutes on liquid cycle (slow exhaust).
6. After autoclaving, allow time for material to cool before handling.

Disposal: After destruction of the toxin, seal the top to the primary container and place into a zip-lock plastic bag. Contact EH&S for the disposal of Hazardous Materials. EH&S personnel will collect inactivated Toxin for disposal.

References:

- Morin, R.S., and Kozlovac, J.P. 2000. Biological Select Agents, p. 261-272. In D.O. Fleming, and D. L. Hunt (ed.), Biological Safety, Principles and Practices. ASM Press, Washington, D.C.
- Slein, M.W., and Sansone, E.B. 1980. Degradation of Chemical Carcinogens, An Annotated Bibliography. Van Nostrand Reinhold Company, New York, N.Y.
- Lunn, George and Sansone, Eric B., 1994, Destruction of Hazardous Chemicals in the Laboratory, 2nd Edition, Wiley, New York, N.Y.
- Armour, Margaret-Ann, 1996, Hazardous Laboratory Chemicals Disposal Guide, Second Edition, Lewis Publishers, Boca Raton, FL