

SAFE HANDLING OF RICIN

pub# CSU9

Ricin is labeled extremely toxic. It is used as a tool in cancer research studies. At UCSF, the study consists of injecting ricin into the sheep's lower lung lobe. The Office of Environmental Health and Safety (EH&S) must collect the ricin-contaminated lung material for proper disposal.

To submit the ricin waste for disposal, carry out standard EH&S collection procedures and note the following requirements. Strict adherence to these requirements is essential for the safety of the personnel handling the waste and compliance with waste regulations.

The following safety information is a summary of the data available from the Material Safety Data Sheet (MSDS) for ricin.

NOTE: Newly proposed Federal Regulations will require prior registration of all ricin use. Please contact EH&S for updated registration information if you intend to use ricin.

Health hazard data

Acute effects: May be harmful by inhalation, ingestion, skin absorption. May cause allergic skin reaction.

First aid procedures

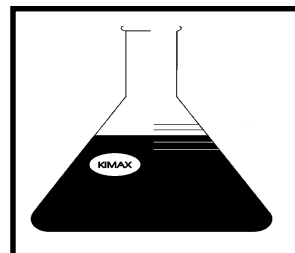
Eye splash: Immediately flush eyes or skin with copious amounts of water for at least 15 minutes; assure adequate flushing by separating eyelids with fingers.

If inhaled: Remove to fresh air. If breathing is difficult, call a physician.

Ingestion: Wash-out mouth with water provided person is conscious. Call a physician!!! Remove contaminated clothing and shoes.

Spill and disposal procedures

Spilled material: Evacuate area. Shut-off all sources of ignition. Call UCSF Emergency number: 9-911. At San Francisco General Hospital call 206-8522.



Protective equipment

Eyes:	Safety goggles.
Skin:	Chemical resistant gloves, clothing.
Ventilation:	Mechanical exhaust.
Respirator:	NIOSH/MSHA-approved respirator.
Other:	Safety shower and eye wash. Full protective clothing.

Storage and handling precautions

- ◆ Do not get in eyes, skin, clothing. Do not pipet by mouth.
- ◆ Do not breathe vapor.
- ◆ Keep tightly closed.
- ◆ Wash thoroughly after handling.
- ◆ May cause sensitization by skin contact.
- ◆ Wear suitable protective clothing.

Waste handling and disposal

Packaging procedure: Be sure that all ricin-contaminated waste is first decontaminated with 10% bleach. The waste can then be disposed as chemical waste.

Lung and other Liquid:

- ◆ Obtain a wide mouth glass jar with a lid that has a good seal to ensure that spills are prevented and odors are minimized.
- ◆ Place the ricin-contaminated material directly into the jar.
- ◆ Once the jar is full, close the lid tightly and attach a Hazardous Waste Tag. Write on the tag the following: Ricin and 10% bleach contaminated material.
- ◆ Request EH&S for pick-up.

Sharps:

- ◆ Place sharps waste (needles, syringes, scalpels, blades, etc.) into a sharps container.
- ◆ Deface the biohazard symbol to signify the absence of infectious material.
- ◆ Once the sharps container is 3/4 full with the material, close the lid and attach a Hazardous Waste Tag. Write on the tag the following: Ricin and 10% bleach contaminated material.
- ◆ Request EH&S for pick-up.

Other solid waste:

- ◆ Place solid waste (gloves, absorbent pads, etc.) in clear plastic bag, double bag if necessary. There must be no standing liquid.
- ◆ Close the bag and attach a Hazardous Waste Tag. Write on the tag the following:
Ricin and 10% bleach contaminated material.
- ◆ Request EH&S for pick-up.

Waste removal procedure: To facilitate an orderly and efficient removal of ricin waste, a Chemical Waste Removal Form must be completed prior to pick up. Mail the form to Box 0942 or call EH&S at 476-0544. The waste will be picked-up on Thursdays if the waste is located at the Animal Care Facility building (Medical Research Building I). If the waste is at the Health Sciences East and/or Health Sciences West buildings, it will be picked up on Mondays.

Pick-up procedures:

- ◆ Follow the packaging procedures as outlined above. Failure to follow all of the above procedures will require correction by the users prior to pick-up by EH&S. The Hazardous Waste Tag must indicate the building and room number, toxic is encircled on the hazard class, solid or liquid on the physical state, and ricin and 10% bleach contaminated waste on the chemical name and composition.
- ◆ Complete the Chemical Waste Removal Form. Follow the instructions on the form.
- ◆ Do not place the waste in the hallway.

Contact EH&S prior to use for specific instructions.