Standard Operating Procedures for Doxycycline

For an Emergency refer to the Safety Data Sheet

Hazards:
Possible Teratogen- may cause birth defects
Toxin- inhalation, ingestion, skin contact
Irritant- respiratory tract, eyes

Chemical handling instructions:

Personal Protective Equipment (PPE):
Those handling Doxycycline must wear chemically resistant gloves (preferably nitrile), lab coat, eye protection, and appropriate lab attire (pants, closed-toe shoes). A respirator must be used if exposure to dust is anticipated.

Preparing Doxycycline solutions:
1. Those preparing Doxycycline solutions must always handle it inside a certified chemical fume hood.
2. The work area should be prepared by laying down an absorbent work surface with the absorbent material facing up. Tape the edges of the absorbent material to prevent its movement in the fume hood.
3. Care should be taken to not generate any aerosol or dust during the preparation or injection procedure. Always wash hands after removing gloves following handling Doxycycline.
4. To clean areas where Doxycycline has been handled, wash the area with soap and paper towels after removing the absorbent material. Any contaminated paper towels will then be placed into a container for hazardous waste, appropriately labeled for waste removal and placed in a designated area for disposal.

Waste Disposal:
1. Any leftover/unused Doxycycline should be collected for disposal as hazardous waste. All material contaminated with the chemical and residual chemical must be disposed of as hazardous waste. Re-useable glassware and other non-porous materials can be decontaminated by soaking in 10% bleach for 24 hours.
2. Used needles/syringes should be disposed in a sharps container destined for incineration.
3. Contact the Safety Office at x2697 or SafetyOffice@unthsc.edu for hazardous waste pickup.

Animal Experiments
Research staff must inform DLAM in advance that Doxycycline will be used, and arrangements will be made for appropriate animal housing.

Animal Handlers
Precautions for Handling Food and Water:
1. When handling doxycycline treated food and water Nitrile gloves, procedure mask, and safety glasses will be worn.
2. Avoid creating dusts from food – do not sift or shaking food.

3. Avoid creating aerosols from water – reduce the distance from stock container to water bottle when pouring.

4. Wash hands and arms immediately after handling to avoid skin irritation.

5. Remove and dispose of mask after use. Do not reuse masks or gloves.

6. Dispose of waste as described above.

Cage handling:

1. DLAM staff should be made aware of Doxycycline use and cage cards should be labeled with “Doxycycline” during treatment.

2. Food, water and bedding are considered hazardous after treatment with Doxycycline.

3. Contaminated food can be disposed of with bedding. All bedding changes should be handled using procedures that minimize aerosolization.

4. Contaminated water can be poured down the drain. Utilize gloves, mask, and goggles to protect from splashes.