

## Use of Tamoxifen

### Purpose:

To provide guidance for the use of Tamoxifen in the laboratory and animal facility environment. Tamoxifen is used at UW-Madison in animal research for a variety of research applications.

### Precautions:

The following information can be used to complete the Safety section of your animal protocol.

1. Chemical hazard agents – (Identify the category of the chemical): (*Select all of the following*)
  - Carcinogen
  - Reproductive Hazard/Teratogen
  - Toxicant/Toxic Agent
2. Containment preparation – (Containment equipment required for the preparation of the chemical): (*Select one of the following*)
  - Fume Hood

**OR**

  - Ducted Biosafety Cabinet (BSC)
3. Containment animals – (Containment equipment required for chemical administration and handling animals after exposure to the chemical): (*Select one of the following*)
  - Fume Hood

**OR**

  - Biosafety Cabinet (BSC)

**NOTE:** For Rodents: Microisolator or other containment type housing caging is recommended.
4. PPE needed - (for handling live animals, carcasses or animal waste/dirty bedding): (*Select all of the following*)
  - Exam gloves – nitrile
  - Safety glasses/goggles
  - Lab coat or disposable gown

5. Waste Disposal: (disposal of animal waste/dirty bedding from animals after exposure to the chemical) (*Select both options and include additional information for Other*)
- Bag animal waste/dirty bedding and place sealed bag in secondary container and place secondary container in regular trash.
  - Other: Chemical Hazard Cage Labels are required on each individual cage containing the hazard and must contain the chemical health hazard symbol and “Agent and disposal method”. Labels are removed or crossed out when the special handling time has ended. \*Chemical Hazard Cage Labels are available at [www.ehs.wisc.edu/ehs-signage](http://www.ehs.wisc.edu/ehs-signage).

**For Aquatic Use:** (*Select Other and include additional information*)

- Other:  
After use, diluted tamoxifen is poured into a labeled waste container, and this waste container is picked up by Chemical Safety for disposal. \*Contact Chemical Safety for pickup at <https://ehs.wisc.edu/disposal-services/chemical-disposal/>.  
Chemical Hazard Cage Labels are required on each individual tank containing the hazard and must contain the chemical health hazard symbol and “Agent and disposal method”. Labels are removed or crossed out when the special handling time has ended. \*Chemical Hazard Cage Labels are available at [www.ehs.wisc.edu/ehs-signage](http://www.ehs.wisc.edu/ehs-signage).
- **Note:** Please contact chemical safety regarding the quantity and concentration of the chemical you will be using to determine if additional disposal requirements are needed.

6. Carcass disposal: (*Select the following*)

- Pick up by EH&S for incineration.

7. Chemical human risk: (*Add the following*)

- Exposure to tamoxifen or tamoxifen metabolites has been associated with an increased risk of cancer. Tamoxifen is considered a genotoxin also. Prenatal, neonatal, and postnatal exposure to tamoxifen could lead to varying levels of reproductive toxicity. Pregnant and lactating women should avoid exposure to tamoxifen and animals that have been administered tamoxifen. Primary routes of occupational exposure to tamoxifen include aerosol exposure, ingestion, accidental injection, and tissue/transplacental absorption.

**Additional information:**

If a respirator is needed Occupational Health can also be consulted as to the appropriateness of using an N95 when higher respiratory protection is recommended.  
Note: personnel must receive medical clearance and fit testing for respirator use.

**References:**

“Tamoxifen SDS” <https://www.sigmaaldrich.com/US/en/sds/SIGMA/T5648>

“Tamoxifen SDS” <https://cdn.caymanchem.com/cdn/msds/13258m.pdf>